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ABSTRACT

This handbook provides a basis for consideration of acceptable approaches which are available and may be used to initiate the use of construction management services in the planning, design, and construction of federally assisted construction projects. It includes the mandatory federal requirements as well as acceptable procedures for selecting and awarding contracts to construction managers. In addition, it enumerates some of those items which should be included in a contract for construction management services. The procedures set forth are allowable within the limitations of existing federal statutes applicable to federally assisted construction projects. Particular attention has been given to satisfying the requirements of competitive bidding, as they apply to such projects. (Author)



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**TECHNICAL HANDBOOK FOR
FACILITIES ENGINEERING
AND CONSTRUCTION MANUAL**

4 PART 2

Federally Assisted Activities

**GUIDE FOR PROJECT APPLICANTS
CONSTRUCTION MANAGEMENT SERVICES**

**FACILITIES
ENGINEERING
CONSTRUCTION**

U S DEPARTMENT OF HEALTH
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FOREWORD

This Handbook contains information for construction management contracts on DHEW financially assisted construction projects.

Further information on any item contained in this Handbook may be obtained from the DHEW Regional Engineer, Regional Office of Facilities Engineering and Construction (Exhibit 7).

DISCRIMINATION PROHIBITED -- Title VI of the Civil Rights Act of 1964 states, "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Therefore, any program or activity receiving financial assistance from the Department of Health, Education, and Welfare must be operated in compliance with this law.

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CHAPTER I INTRODUCTION

1.01 Purpose of This Handbook

The purpose of this Technical Handbook is to provide a basis for consideration of acceptable approaches which are available and may be used to initiate the use of Construction Management services in the planning, design, and construction of Federally assisted construction projects. It includes the mandatory Federal requirements as well as acceptable procedures for the selection of, and the awarding of contracts to, Construction Managers. In addition, it enumerates some of those items which should be included in a contract for Construction Management services. The procedures set forth herein are allowable within the limitations of existing Federal statutes applicable to Federally assisted construction projects. Particular attention has been given to satisfying the requirements of competitive bidding, as they apply to such projects.

1.02 Construction Management - A Professional Service

Construction Management is a procedure by which an Owner, desiring to construct a facility of unusual scope and complexity, contracts for professional Construction Management services to provide technical consultation during the design stage of a project and also to provide for organizing and directing construction activities during the construction phase. Under this procedure, the Construction Manager, operating as a member of an Owner-Architect-Construction Manager team, is normally responsible for cost estimates and cost control, review of design with a view toward value engineering, consultation on construction techniques, construction coordination and scheduling, and direction of all construction activities.

Within the past few years, several factors have emphasized the need for the services of Construction Managers. Probably the most significant is the accelerated increase in the cost of construction. Coupled with the increase in costs is the increase in the size and complexity of projects, particularly those concerning higher education and medical facilities. Because of the unprecedented inflationary trend and the resulting high cost of these facilities (\$50,000,000 to \$100,000,000 is becoming commonplace), it is sometimes advantageous to accelerate the design and construction schedule so that work is started and completed at the earliest possible dates. The need for accelerating the project schedule and controlling the construction costs has caused an increased demand for specialized skills of management. Developing well-coordinated schedules through the use of network analysis (PERT, CPM), and providing cost control, is a logical Construction Management responsibility.

Most owners, not having the necessary technical competence on their administrative staffs, could benefit from assistance in coordinating the design and construction of proposed facilities by employing the services of experienced Construction Management firms to represent them in working with the architectural planners and constructors engaged on the project. The employment of Construction Management services during the design and construction phases of a project can provide the Owner with the necessary technical capability to overcome those problems associated with increasing construction costs, complex projects, and accelerated construction schedules.

1.03 The Team Approach

In the team approach, each member of the team will have precedence and exercise leadership in his own sphere of operations. In accordance with this principle, the Architect/Engineer will have prime responsibility for design of the project including mechanical and electrical systems. The Construction Manager's role during the design stage will be as an adviser on material costs and construction methods and their costs; however, as the member of the team primarily responsible for the project cost, the Construction Manager will exercise overall cost control. The Owner's role is that of making decisions regarding the approval of final solutions and assuring that sufficient funds are available to complete the project within current budget estimates.

Adding Construction Management talents to the design team enhances the Architect's design capabilities by providing knowledgeable consultation in the areas of construction costs, materials and methods of construction, manpower utilization, and schedule of the work. It relieves the Owner of many of the anxieties that usually beset him, particularly those concerned with forecasting costs and completion date. Finally, the Construction Manager can provide an additional link between the designer and those who will be bidding the work. This could eliminate many of the conflicts and resulting expensive change orders which are prevalent in the traditional contracting method.

One of the important benefits which comes from the application of Construction Management is the acceleration of the project construction schedule through the use of phased construction.

CHAPTER II CONSTRUCTION MANAGER'S FUNCTIONS AND RESPONSIBILITIES

2.01 Design Phase

A. General

A Construction Management firm provides professional services and is employed by, and functions on behalf of, the Owner. The firm works as a team member with the Owner and the Project Architect during the design and/or construction phases of a project. During the design phase the Construction Management firm provides consulting

services in the formulation of the project budget and provides information on construction technology and market conditions to assist in keeping the project design within the prescribed budget.

B. Formulation of the Project Budget

The Construction Manager assists the Owner in developing the project budget intended to be used as a guide throughout the project design. He should give particular attention to projecting the costs of the work to the estimated time of contract award. The Construction Management firm should have in-house specialized capability for preparing accurate detailed budgets. It is extremely important that the budget be realistic and detailed and that the validity of the estimates be authenticated to the maximum extent possible. The Construction Manager develops additional detailed cost estimates at schematic, design development, and final drawing stages of the project, and other detailed estimates concerning parts of the work that may require special attention or analysis.

C. Technical Consultation

The Construction Manager provides technical consultation to the Architect with regard to utilization of materials, products, and construction techniques and assists the Architect in developing alternative solutions to problems of cost and scheduling of work. The intent of utilizing such talents, particularly in the early phase of the design development, is to develop alternative design solutions for the high cost areas of the project. It must be emphasized that the Construction Manager is an integral part of the team of Owner/Architect/Construction Manager. A spirit of total cooperation and commitment toward the project goals must be established at the outset.

Technical consultation to the Architect or other professional disciplines shall not infringe upon the design responsibility of those disciplines. The Construction Manager may make recommendations relating to the cost of a particular design or material selection; however, if such recommendations are accepted for incorporation into the project design, their application with regard to structural stability and life safety shall be the responsibility of the Architect/Engineer. The Construction Manager shall not be assigned responsibilities which duplicate those assigned in the contract for architectural/engineering services.

D. Field Services

The Construction Manager may be required to provide assistance in support of topographical surveys, preparation of maps, and conducting of subsurface investigations such as test borings and test loadings.

E. Assembling of Bid Packages

Upon completion of final working drawings, preparation should be made for assembling the bidding documents into bidding packages. In some cases it may be advisable to limit the number of packages to the major components of work such as general construction, heating, ventilation, air conditioning, plumbing, electrical, and elevator work. On other projects, greater economies and quality control may be achieved through further subdividing those components into more specialized components. Separate contracts may be desired on ceiling and lighting systems, structural frame, foundation work, concrete, masonry, etc. The number of separate bid packages or contracts should be the determination of the Construction Manager in concert with the A/E. Where phased construction is employed, some parts of the work, such as foundation and superstructure, will be bid prior to the completion of the final working drawings. (See Section J for details on phased construction.)

F. Preparation of the Bidders List

One of the contributions of a Construction Manager to a project is the preparation of the bidders list for the various bid packages. He should have intimate knowledge of the available work force in the locality of the project and the experience to analyze the contracting firms that may have the ability as well as an interest in bidding on the work. A careful analysis of the local as well as the national (and on occasion the international) situation can yield savings of significant proportion.

Prequalification of prospective bidders may be appropriate where highly specialized skills or critical production schedules are required in accomplishing the work. The Construction Manager then recommends to the Owner those contractors who are qualified to bid on the project.

G. Invitation for Bids

The invitation-for-bid (IFB) documents should be assembled by the Construction Manager, and all actions such as answering inquiries from prospective bidders, issuance of addenda prepared by the Architect/Engineer, and scheduling of bid openings should be the responsibility of the Construction Manager in coordination with the Owner and the Architect/Engineer.

H. Pre-Bid Conference

The Construction Manager should be responsible for arranging pre-bid conferences for the purpose of informing prospective bidders of special conditions or requirements in the proposed work. The pre-bid conference may also serve as a means for obtaining comment from prospective bidders to clear up any ambiguities in the IFB documents. The Owner and the Architect should be represented at such conferences.

I. Bid Receipt, Review, and Evaluation

Bid openings should be conducted by the Construction Manager with a representative of the Owner present. He should open the bids, tabulate the results of the opening, and, after evaluation and concurrence of the Architect, recommend contract awards to the Owner.

J. Scheduling the Project

The Construction Manager can have a significant impact on the project in scheduling of work. Scheduling of work is closely coupled with development of bid packages and early cost estimating requirements. A time schedule for designing and accomplishing the work must be set.

Through the employment of Construction Management services, the design and construction time schedule can be accelerated to accomplish the work in the least amount of time. This technique, which may include phased construction, is effective in shortening the overall time required to complete a project.

Basically, phased construction involves starting of construction prior to completion of the design documents. Certain phases of the work such as foundations, superstructures, exterior walls, etc., can be separated into design packages. Upon completion of that portion of the design, the work is advertised and bid, and construction started prior to resolution of the design for the total project. Material purchased for the Owner's account can be better scheduled to take advantage of market conditions. This is specifically applicable to the purchase of long-lead items such as electrical switchgear, transformers, and major items of heating and ventilation. Time savings through the pre-purchasing of critical items can mean an earlier completion date and earlier occupancy of the facilities. Each day of time saved can often be translated into dollars saved.

There are certain inherent risks to the Owner in constructing a project under accelerated or phased conditions. Of greatest concern is the risk of starting certain parts of the work before the total cost of the project is known. Unless the Owner has some guarantee that the project can be completed within the prescribed budget, he may find himself in the untenable position of having started work with insufficient funds to complete the facility. On Federally assisted projects, the Owner must reduce this risk by obtaining a guaranteed maximum price for the entire work prior to award of separate contracts for any part of the work. (See Section 3.01.B, Guaranteed Maximum Price Contracts.)

2.02 Construction Phase

A. General

During the construction phase, the Construction Manager coordinates the project to develop an orderly, controlled construction effort within the agreed time frame. In order to discharge his responsibilities, he must have a strong capability in engineering, budgeting, cost estimating, scheduling, purchasing, inspection, management, and labor relations. In addition, the firm should have a record of successful performance in furnishing professional services during the project design phase and in management of the construction of projects.

B. General Condition Items

The Construction Manager's responsibilities may include items listed under the General Conditions of the contract documents, normally performed by a general contractor on a lump-sum, fixed-price contract. These functions may require the furnishing of labor at the site. However, such labor should be restricted to performing support type operations such as the establishment, maintenance, and operation of temporary field construction facilities; the provision of security forces for the protection of the work and cleanup and debris removal. (See Section 3.07 A(2) for reimbursable costs on General Condition items.)

C. Accounting Records

Financial and cost accounting records should be maintained for all costs applied to the project. The Construction Manager should be responsible for maintaining such records.

D. Supervision of the Work

The Construction Manager shall assign adequate personnel to the site of the work for managing and coordinating all work performed on the project. Services required at the site will vary according to the needs of the Owner and the nature of the project. Some of

the basic services the Construction Manager should be prepared to provide are coordination of the separate contracts, monitoring the individual phases of the work to determine which crafts are on schedule, adjusting the work to accommodate changed conditions and unanticipated interferences; and in coordination with the Architect, inspecting workmanship, material, and equipment as to conformity to approved contract drawings and specifications; arranging for the performance of field and laboratory tests; preparing reports on progress of the work; reviewing all progress payments and recommending payment to the Owner; reviewing all change proposals, recording all changed work that deviates from the contract documents; and preparing as-built drawings upon completion of the project. The listing of the above items is not exhaustive but is representative of the types of services that the Construction Manager may be expected to perform.

E. Construction Contract Bond and Insurance Requirement

Owners receiving Federal assistance for construction of projects must require that prime contractors provide for the following minimum coverages for contract bonds and insurance:

(1) Surety Bonds

- a. Performance Bond - 100 percent of the contract sum.
- b. Labor and Material Bond - 100 percent of the contract sum.

(2) Insurance

- a. Contractor's Protective Liability Insurance - Bodily injury liability, \$300,000 - \$500,000; and property damage, \$100,000 - \$300,000.
- b. Owner's Protective Liability Insurance - Bodily injury, \$300,000 - \$500,000; and property damage, \$100,000 - \$300,000.
- c. Property Insurance (Builder's Risk) - Full insurable value of entire work at the site.

(3) Provision of Surety Bonds

Bonds for the entire work must be provided before start of construction by either the individual prime contractors in the amount of their contracts or the Construction Manager. Contractor's Protective Liability Insurance should be provided by either the Construction Manager or the individual contractors. Owner's Protective Liability Insurance and Property Insurance (Builder's Risk) may be provided by the Owner or the Construction Manager.

2.03 Construction Bidding

- A. The general function of the Construction Manager is to serve as the Owner's representative with responsibility directly to the Owner. His employment should be such to preclude any conflict of interest. In particular, the Construction Manager should avoid bidding work in competition with bidding contractors. Therefore, neither the Construction Management firm nor any firm in which a principal stockholder or member of the Construction Management firm has a financial interest shall, during the term of the contract, make or cause to be made any bid for construction work on the project referred to in the Construction Manager's contract.
- B. The bidding on construction contracts must be conducted so as to achieve maximum competition among qualified bidders in order to obtain the most reasonable price for acceptable work. Therefore, competitive bidding by public advertising is the preferred method of contracting.

When public advertising is used as the method of solicitation the Owner must:

- (1) Place the advertisement in newspapers, trade journals, and/or such other media having wide circulation among prospective bidders; and
- (2) Allow adequate time for contractors to prepare bids. Normally 30 days is considered reasonable.

- C. Competitive bids may also be obtained by selective solicitation. When the selective solicitation method of bidding is used, the Owner must:
 - (1) Establish reasonable prequalification standards for bidders and include them in the "Information for Bidders" document.
 - (2) Solicit by written invitation and receive positive bid responses from three or more contractors. Should less than three responsive bids be received, the project shall be publicly advertised as described in paragraphs B(1) and (2) above.
 - (3) Consider bids from any contractor who requests permission to bid and who is determined by the Owner to meet bidding prequalification requirements set forth in the "Information for Bidders" document.

NOTE: IT IS A DHEW REQUIREMENT THAT ALL CONTRACTS FOR CONSTRUCTION WORK ON PROJECTS FINANCED IN WHOLE OR IN PART BY FEDERAL FUNDS BE COMPETITIVELY BID AND THAT THE CONTRACT BE AWARDED TO THE LOW RESPONSIVE AND RESPONSIBLE BIDDER.

2.04 Contract Awards

- A. The Owner shall be responsible for approving awards of all contracts after evaluation and recommendation by the Construction Manager. Several options are available to the Owner with regard to award of contracts.
 - (1) The Owner may make the award to the contractor and retain full financial responsibility for the function of the contractor on the project.
 - (2) The Owner may delegate the responsibility for making contract awards to the Construction Manager. In this instance, the Construction Manager shall have provided a guaranteed maximum price for the entire work.
- B. It is recognized that some State or local authorities may prohibit the delegation of construction contract awards to a third party such as a Construction Manager. Where State or local statutes conflict with the information in this guide relative to the award of contracts, the State or local statutes shall prevail.
- C. Participating Federal funds in any project require that all construction contracts between the Owner and contractors, between the Construction Manager and contractors, and between contractors, subcontractors and lesser tiers of subcontractors, incorporate the provisions of the U.S. Department of Health, Education, and Welfare Form HEW 514 titled "DHEW Requirements for Federally Assisted Construction Contracts Regarding Labor Standards and Equal Employment Opportunity," or the current edition of AIA Form 201S/C.

CHAPTER III CONTRACTING FOR CONSTRUCTION MANAGEMENT SERVICES

3.01 Types of Contracts

- A. The DHEW contract guide forms included in this publication as Exhibits are identified as TYPE I (for use in awarding Construction Management Contracts without a Guaranteed Maximum Price), and TYPE II (for use in awarding Construction Management Contracts with Guaranteed Maximum Price). The TYPE I guide form is recommended where it is intended to award all contracts for construction prior to start of actual construction work at

the site. The TYPE II guide form is recommended where it is intended that the project be phased or multiple contracts awarded on an accelerated schedule. In the case of phased construction a Guaranteed Maximum Price must be established for the completion of the project prior to start of construction work at the site.

- B. Guaranteed Maximum Price contracts, within the context of Federally assisted construction, are defined as those contracts in which the Owner is guaranteed that payment for the cost of the work, as set forth in the contract documents, will not exceed a stipulated sum. The Construction Manager shall provide performance and payment bonds each in the amount of 100 percent of the Guaranteed Maximum Price. In the event that the cost of the work as set forth exceeds the stipulated sum, the Construction Manager agrees to complete the work at no additional cost to the Owner. The ultimate cost of work to the Owner shall be calculated on the basis of the summation of all contracts awarded, the cost of materials purchased, and the cost of reimbursable items authorized by the Owner in executing the work. Any savings realized through the reduction in the cost of the work below the stipulated Guaranteed Maximum Price shall accrue to the Owner.
- C. The sharing of savings with the Construction Manager on a percentage basis is not permitted. It is presumed that under the Construction Manager contractual arrangement the Construction Manager is compensated through his fee for services and that his professional obligations require that he generate the maximum savings possible for the Owner. Additional incentives such as shared savings should not be allowed.
- D. The DHEW TYPE I and TYPE II recommended guide forms for executing Construction Management contracts have each been developed as two-part documents.

PART A - Construction Manager's Consultation Services Contract - The primary purpose and intent of this document is to secure the services of a Construction Manager to provide design consultation on the project to assure that the project costs will remain within established budget limitations; that the project will be scheduled efficiently for both the design development and construction phases to be ready for occupancy at the earliest possible date; and that the design for the project will be such that the most efficient use of materials and methods will be employed to provide quality construction at the least cost.

PART B - Construction Manager's Fee plus Services Contract

During Construction - The primary purpose and intent of this document is to secure the services of a Construction Manager to organize and direct the complete construction of the project within prescribed budget estimates and time limitations. The PART B document may include the requirement that the Construction Manager provide a Guaranteed Maximum Price.

E. The primary purpose in using the two-part documents for Construction Management Contracts is to allow the Owner to enter into a limited obligation with the Construction Manager during the design phase of the project. PART A of the Construction Management Contract is executed with the option that the Owner may award PART B if the Owner is satisfied with the services provided by the Construction Manager thru PART A. Should the Owner decide to terminate the Construction Management Contract prior to award of PART B, such action may be taken without financial loss to either party.

NOTE: TERMINATION CLAUSES SHOULD BE INCLUDED IN ALL CONSTRUCTION MANAGEMENT CONTRACTS TO PROVIDE FOR RELEASING THE OWNER AND THE CONSTRUCTION MANAGER FROM THEIR CONTRACTUAL OBLIGATIONS PRIOR TO START OF CONSTRUCTION ON THE PROJECT AS WELL AS TERMINATING THE CONSTRUCTION MANAGEMENT CONTRACT DURING THE CONSTRUCTION PHASE ON A BASIS WHICH IS EQUITABLE FOR BOTH THE OWNER AND THE CONSTRUCTION MANAGER.

3.02 STEP 1 - Establishment of a Source List

A. The Owner should establish a source list of firms that may be considered for providing Construction Management services. Firms should be invited to submit their qualifications to the Owner in advance of solicitation for proposals on a specific contract. These firms should be requested to submit a statement of their qualifications for consideration in the same manner as requested for architectural and engineering firms. (See Exhibit 1 for Construction Manager's Qualification Form.)

B. The Owner should convene a selection panel to review the qualification statements submitted by interested firms. A form similar to that shown in Exhibit 1 should be used to rate the interested firms. The top-rated firms should then be notified that they are being considered for the award of a Construction Management Services Contract. The firms not so rated should be notified that they are no longer being considered for the award.

3.03 STEP 2 - Inviting Construction Managers to Submit Proposals

A. After reviewing the qualification forms, the firms who are considered qualified should be invited to submit formal proposals for performing Construction Management services on the project. The preferred method of requesting proposals for Construction Management services is on the negotiated basis using the forms provided in Exhibit 2.

The invitation for proposals should include the following data:

- (1) The names of the Owner, the Project Architect (if already selected), the Federal funding agency, and other specific parties who may have a significant role in the administration of the project.
- (2) The project title and location, the approximate number of gross square feet in the project, and a brief description of the project.
- (3) The date for receiving proposals for the project as well as the address to which proposals should be delivered.
- (4) The description of the role of the Construction Manager on the specific project, including a listing of the Construction Manager's tasks.
- (5) A specific statement as to the requirements for the award of construction contracts on Federally assisted construction projects.
- (6) The manner in which the Owner intends to award the Construction Management Contract; i.e., Part A, Design Consultation; and Part B, Construction Management Services Contract During Construction.

NOTE: THE GUIDE FORMS INCLUDED AS EXHIBIT 6 TO THIS PUBLICATION PROVIDE FOR THE OPTION OF RECEIVING COMPETITIVE BIDS FOR CONSTRUCTION MANAGER SERVICES CONTRACTS. HOWEVER, IT IS NOT A FEDERAL REQUIREMENT THAT OWNERS RECEIVE FORMAL BIDS FOR CONSTRUCTION MANAGEMENT SERVICES.

3.04 STEP 3 - Briefing Meeting

A. A meeting should then be scheduled with the selected firms, briefing them in more detail as to the services required and giving more specific details of the proposed project. A

copy of the program of requirements and any supporting diagrammatic sketches should be made available to each firm.

B. An Information Package should also be prepared for each firm to be distributed at the briefing meeting. The Information Package should contain the following:

- (1) A formal invitation to submit a proposal for Construction Management services (Exhibit 2).
- (2) Construction Manager's Proposal Form (Exhibit 3).
- (3) Any special instructions for information to be submitted with the proposal; i.e., a prepared plan by which the firm intends to manage the project.
- (4) A copy of the proposed Construction Management Contract Form, Part A and Part B (Exhibit 4 or 5).
- (5) The closing date for receipt of proposals in the Owner's office or other designated place for receipt of proposals.

3.05 STEP 4 - Construction Managers' Proposals or Bids

A. The Construction Managers' proposals submitted in response to the Owner's invitation should be submitted on forms provided by the Owner. Exhibit 3 may be used for the purpose of receiving such proposals. The following information should be requested in the proposals:

- (1) Date of the proposal.
- (2) Identification of the Owner. The name and address of the facility for which the proposal is being submitted.
- (3) The name of the firm submitting the proposal.
- (4) The fee for services limited to design consultation specified under Part A of the Construction Manager's Agreement.
- (5) The fee for services for the development of a Management Control System (MCS) specified under Part A of the Construction Manager's Agreement.
- (6) The fee for services during construction of the project, specified under Part B of the Construction Manager's Agreement.
- (7) An agreement that the Construction Manager will guarantee his proposal for a period not to exceed 60 days from the designated date of receipt.

- (8) The classification of individual or firm submitting the proposal; i.e., Individual, Partnership, Corporation, or Joint Venture.
- (9) Statement that the individual or firm agrees that within 10 days after receipt of written notice from the Owner of the acceptance of the proposal, Part A of the Construction Manager's Agreement will be executed and delivered to the Owner.

B. Where the Owner requires that formal bids be submitted on the project, the following additional items should be requested with the bids:

- (1) Construction Manager's Bid Bond.
- (2) Acknowledgement of all Addenda and Notices.

3.06 STEP 5 - Selection of the Construction Manager

- A. Upon receipt of proposals from the invited firms, the Owner should reconvene the selection panel for the purpose of reviewing the proposals and making a recommendation for contract award. Individual interviews should be scheduled with each of the firms if it is considered by the panel to be helpful in making a final selection for contract award. It may be advisable to require that the process of selection include a presentation to the Owner.
- B. Where the Owner requires formal bids to be submitted, the low responsive bidder should be awarded the contract.
- C. The Construction Manager should be employed at an early development stage of a project in order to permit him to work with the Architect in developing the requirements that will govern the design of the project and the project cost.

The employment of the Construction Manager after the completion of the project design is not recommended because his effect on the total project cost at this place in time will be minimized. Even though a Construction Manager may be able to reduce the cost of the project through his capability of preparing bid packages as well as managing the construction effort, substantial cost savings can only be achieved during the design phase. The most appropriate time for selection of the Construction Manager is simultaneously with the selection of the Project Architect or immediately afterwards.

There should be a careful comparison of the Architectural Services Contract with that of the Construction Management Contract to insure that there is no duplication of services. The standard forms AIA B231 and AIA 201 should be modified if a Construction Management Contract is anticipated. To avoid duplication, the contracts should be prepared simultaneously.

3.07 Construction Management Fees

A. The cost of Construction Management Services can be categorized under two types; Basic Fee and Reimbursable Costs.

(1) Basic Fee Costs are defined under DHEW procedures as those costs necessary to provide the services set forth in the Construction Management Agreement, except those services set forth under General Condition Items. Basic fee services include, but are not limited to:

- a. Compensation to officers or principals, salaries of home office personnel and full or part-time supervisory personnel employed at the job site, and related income taxes, payroll taxes, insurance and pensions.
- b. Travel, per diem, and expediting costs by either home office or job-site management personnel required to fulfill the Construction Management Agreement.
- c. Profit, overhead, and cost of home office facilities expenses.
- d. Recruitment costs for home office or job-site personnel.
- e. Professional fees for consultation, legal, accounting and bookkeeping expenses.

(2) Reimbursable Costs are defined as those costs and expenses (exclusive of profit and overhead) for which reimbursement may be authorized in advance, in writing, by the Owner. Reimbursable Costs shall generally be limited to General Condition Items set forth in the Construction Management Agreement and shall not include any costs included above under Basic Fee Costs. General Condition Items may be awarded on the basis of competitive bids. However, in either case the Construction Manager shall be restricted to performing support type operations such as the establishment, maintenance, and operation of temporary field construction facilities; the provision of security forces for the protection of the work; and cleanup and debris removal. Labor and material utilized in construction of the project and resulting in a permanent part of the total facility shall be performed under separate competitively bid contracts and shall not be included under General Condition Items. A limit of costs on reimbursable items shall be set forth in the Construction Management Agreement. An itemized list of reimbursables which the Owner desires the Construction Manager to perform within the limit of costs shall also be incorporated in the Agreement.

B. It is not in the interest of the Owner to enter into open-end agreements with no limit of fee or reimbursable costs. A specific lump-sum amount should be entered in the Construction Management Contract as the fee for services during the design phase (PART A). A separate lump-sum fee for the development and implementation of a Management Control System (MCS) should be established on those projects where a significant expenditure may be required to develop and implement such a control system. On smaller projects the cost of the MCS may be included in the basic Construction Manager's fee.

NOTE: OPEN END CONTRACTS WITH NO LIMIT OF FEE SHALL BE AVOIDED. LUMP-SUM FEES SHALL BE ESTABLISHED AND SET FORTH IN THE CONSTRUCTION MANAGEMENT CONTRACT IN ORDER THAT ALL PROJECT COSTS MAY BE IDENTIFIED AND DETERMINED TO BE WITHIN THE BUDGET LIMITATIONS. IT IS NOT RECOMMENDED THAT FEES BE ESTABLISHED SOLELY ON THE BASIS OF THE CONSTRUCTION COSTS. THE FEE SHOULD BE BASED ON THE SCOPE AND COMPLEXITY OF THE PROJECT AND AFTER AWARD OF CONTRACT SHOULD BE REVISED ONLY IN THE CASE OF A CHANGE OF PROJECT SCOPE. IF THE CONSTRUCTION MANAGER IS SUCCESSFUL IN REDUCING THE OVERALL COST OF THE PROJECT HE SHOULD NOT BE PENALIZED BY A REDUCTION IN FEE.

C. Under certain circumstances an Owner may desire to terminate the services of a Construction Manager during the design phase, in which case only PART A of the guide forms would be used. However, in most instances the Construction Manager will be employed during both the design and construction phase of the project. PART B of the guide forms has been developed to provide that the Construction Manager state a separate fee for providing services during the construction phase, and further allows the Owner to reserve his decision regarding the award of PART B until the design phase is nearing completion. (See Section 3.01D for an explanation of PART A and PART B of the Construction Management Contract.)

CHAPTER IV SPECIFIC DIFFERENCES BETWEEN TYPE I AND TYPE II CONSTRUCTION MANAGEMENT CONTRACTS

4.01 Authority to Award Construction Contracts

A. Under Type I contracts the Construction Manager performs as an agent of the Owner with regard to the award of construction contracts. The Construction Manager receives bids jointly with the Owner and the Architect. After the bid opening he evaluates the bids and recommends award or rejection. The Owner awards the construction contract after concurrence of the Architect.

B. Under Type II contracts the Construction Manager provides a Guaranteed Maximum Price for completing the entire project, thereby causing his role to change from consultant and advisor to prime contractor. In this role the Construction Manager may award the construction contracts after concurrence by the Owner and his Architect.



4.02 Guaranteed Maximum Price (GMP)

- A. Type I Construction Management contracts do not provide for the Construction Manager giving a GMP for construction of the project. While the Construction Manager provides advice and consultation on construction costs to the Owner and the Architect, his financial responsibility is limited. The Construction Manager, in this case, will be responsible for providing the necessary services to retain project costs within projected budget estimates. In the event of a bid overrun, he will assist in reducing the project costs without additional charge for services.
- B. Type II Construction Management contracts provide for total financial responsibility for the Construction Manager to complete construction of the project at or below a specific price. Additionally, the Construction Manager is required to provide performance and payment bonds to ensure the Owner that the facility can be completed within available funds.

4.03 Inspection Services

- A. On Type I contracts the Construction Manager takes no financial risk regarding the cost of the construction work. As an agent of the Owner he is able to perform all required inspection services to ensure that construction conforms to requirements set forth in the contract documents.
- B. On Type II contracts the Construction Manager does assume financial risk in guaranteeing that the cost of the work will not exceed an established price. Because of the financial risk taken by the Construction Manager in this case, he should not be given the authority to determine whether the work meets the contract requirements. Therefore, on Type II contracts the Architect will assume the responsibility for performing inspection services to determine contract compliance.

FACILITIES ENGINEERING AND CONSTRUCTION AGENCY

**GUIDE FORMS FOR USE ON DHEW FEDERALLY
ASSISTED CONSTRUCTION MANAGEMENT CONTRACTS**

**THIS FORM IS FOR USE IN QUALIFYING CONSTRUC-
TION MANAGERS ON TYPE I OR TYPE II CONSTRUC-
TION MANAGEMENT CONTRACTS**

CONSTRUCTION MANAGER'S QUALIFICATION STATEMENT

Exhibit 1

THIS FORM IS A GUIDE AND SHOULD NOT BE USED WITHOUT BEING
ADAPTED TO THE PARTICULAR NEEDS OF THE INDIVIDUAL PROJECT.

CONSTRUCTION MANAGER'S QUALIFICATION STATEMENT

Required as a qualification statement in advance of submitting proposal for award of Construction Management Contracts.

The Undersigned certifies under oath the truth and correctness of all statements and of all answers to questions made hereinafter.

SUBMITTED TO:

Corporation
Partnership
Individual
Joint Venture
Other

SUBMITTED BY:

NAME:

ADDRESS:

PRINCIPAL OFFICE:

- 1.0 The primary purpose and intent of this statement is to qualify the above named organization as a construction manager to provide design consultation services on the project to assure that the project costs will remain within established budget limitations; that the project will be scheduled efficiently for both design development and construction phases to be ready for occupancy at the earliest possible date; and that the design of the project will be such that the most efficient use of materials and methods will be employed to provide quality construction at the least cost.

- 2.0 How many years has your organization been in business under its present business name? _____

3.0 If a corporation answer the following:

3.1 Date of incorporation:

3.2 State of incorporation:

3.3 President's name:

3.4 Vice-president's name(s):

3.5 Secy's or Clerk's name:

3.6 Treasurer's name:

4.0 If individual or partnership, answer the following:

4.1 Date of organization:

4.2 Name and address of all partners. (State whether general or limited partnership.):

5.0 If other than corporation or partnership, describe organization and name principals:

6.0 List name of project, owner, architect, estimated cost, percent complete and scheduled completion of the projects your organization is managing or acting as prime contractor, in excess of \$ _____ on this date.

7.0 Construction experience in the past five years in which your firm acted as a prime contractor or construction manager on projects in excess of \$ _____ :

Number of Projects						
None	1	2	3	4	5	More

7.1 Educational

7.2 Commercial & Office

7.3 Industrial

7.4 Medical

7.5 Other

7.6 Attach detailed list of above projects indicating whether your organization was prime contractor or construction manager. Give location and description of project including construction cost and date of completion. Also include name, address, and telephone numbers of owner-client for each project.

8.0 Construction cost estimating and cost control capabilities:

IN-HOUSE CAPABILITY		
YES	PARTIALLY	CONSULTANT ONLY

8.1 During Design

8.2 During Construction

8.3 If partially performed in-house, what percentage of time do you use consultants during design _____; during construction _____.

9.0 Experience of staff personnel in the following areas:

	Number of In-House Employees	% of Work Performed In-House	% of Work By Consultants
9.1 Accounting			
9.2 Architecture			
9.3 Civil Engineering			
9.4 Construction Superintendence			
9.5 Contract Law			
9.6 Electrical Engineering			
9.7 Estimating			
9.8 Construction Inspection			
9.9 Labor Relations			
9.10 Mechanical Engineering			
9.11 Safety			
9.12 Structural Engineering			
9.13 Testing Facilities			
9.14 Value Engineering			
9.15 Management			
9.16 Other _____			

10.0 Number of staff personnel normally assigned to a project:

Size of Project in Millions of \$				
1-10	11-20	21-30	31-40	41-50

10.1 Design

10.2 Construction

11.0 List states and categories in which your organization is legally qualified to do business:

12.0 Professional References:

13.0 Name of Bonding Company and name and address of Agent:

14.0 Attach statement of financial condition, including latest regular dated financial statement or balance sheet which must contain the following items:

14.1 Current Assets: Cash, Joint Venture Accounts, Accounts Receivable, Notes Receivable, Accrued Interest on Notes, Deposits, Materials and Prepaid expenses, Net Fixed Assets and Other Assets.

14.2 Current Liabilities: Accounts Payable, Notes Payable, Accrued Interest on Notes, Provision for Income Taxes, Advances Received from Owners, Accrued Salaries, Accrued Payroll Taxes, Other Liabilities, and Capital Stock (Authorized and Outstanding Shares Par Values, and Earned Surplus).

14.3 Date of statement or balance sheet:

14.4 Name of Firm preparing statement:

15.0 Dated at

This Day of 19

Name of Organization:

By:

Title:

16.0 M

being duly sworn

deposes and says that he (she) is the

of

, and that answers to the

foregoing questions and all statements therein contained are true and correct.

19

Notary Public:

My Commission Expires:

THIS FORM IS A GUIDE AND SHOULD NOT BE USED WITHOUT BEING ADAPTED TO THE PARTICULAR NEEDS OF THE INDIVIDUAL PROJECT.

FACILITIES ENGINEERING AND CONSTRUCTION AGENCY

**GUIDE FORMS FOR USE ON DHEW FEDERALLY
ASSISTED CONSTRUCTION MANAGEMENT CONTRACTS**

**THESE FORMS ARE FOR USE IN REQUESTING CON-
STRUCTION MANAGEMENT FIRMS TO SUBMIT PRO-
POSALS ON TYPE I OR TYPE II CONSTRUCTION MAN-
AGEMENT CONTRACTS.**

INVITATION TO SUBMIT PROPOSALS FOR CONSTRUCTION MANAGEMENT SERVICES

Exhibit 2

**THIS FORM IS A GUIDE AND SHOULD NOT BE USED WITHOUT BEING
ADAPTED TO THE PARTICULAR NEEDS OF THE INDIVIDUAL PROJECT.**

**INVITATION TO SUBMIT PROPOSALS FOR
CONSTRUCTION MANAGEMENT SERVICES**

PROJECT OWNER

PROJECT OWNER'S AGENT

ARCHITECT

FEDERAL AGENCY PROVIDING FINANCIAL ASSISTANCE

ROLE

Proposals are invited for the role of Construction Manager (CM) for "the Project" consisting of the construction of:

_____ (Project Title)

_____ (City & State)

to contain approximately _____ gross square feet and _____ levels, and to include

(Brief Project Description)

PROGRAM OF REQUIREMENTS

The Program of Requirements for this project is available in the office of the Owner and shall constitute the basis for the project briefly described above. The Program of Requirements is in narrative form and is supported by diagrammatic sketches to the extent necessary to describe the physical characteristics of the project. The Program of Requirements will be appended to the Construction Manager's Form of Agreement as a part of the formal contract.

RECEIPT OF PROPOSALS

Proposals received will be evaluated by the Owner and scored on a weighted basis in each of the categories contained in the Construction Manager's Qualification Statement. Firms whose proposals and qualifications are determined to be most advantageous to the Owner will be requested to submit price proposals.

Proposals will be received at the following address:

PROPOSALS FOR ROLE OF CONSTRUCTION MANAGER

Only proposals from firms invited on the basis of prequalification information submitted prior to _____ will be considered. The Construction Manager system will be used in which the CM
(date)

performs professional management services, but does not perform with his own forces any of the construction work with the exception of General Conditions. The CM shall operate as a member of an Owner-Architect-CM team which will be involved with production of the project. It is the intent of the Owner to provide for early consolidation of the team of Owner, Architect, and CM to allow acceleration of project development, early commencement of certain elements of construction, reduction in construction costs, and finally, early occupancy.

The CM is essentially an organization which has proven ability to provide technical consultation during the design stage of the project and to act as manager of construction in organizing and directing construction activities on a project of the scope and complexity similar to that identified above. He shall be responsible for cost estimates and budget control, review of design during the entire process with a view towards value engineering, life-cycle costing, construction coordination and scheduling, and direction of all construction activities. The function of the CM, coupled with the above, shall be the assumption of administrative duties in conjunction with the Owner and Architect towards procurement, bidding and contracting as required for construction of the project.

CONSTRUCTION MANAGER'S TASKS

CM tasks will include but are not limited to the following:

- 1) Consultation related to building systems, sequences of events, materials and components.
- 2) Implementation of a management control system (MCS) for use in meeting the objectives of the project in a timely, economical, and acceptable manner.
- 3) Preparation of cost estimates and cost comparisons, including long-term cost effects of various alternatives.
- 4) Inspection of the work from start of construction until completion.
- 5) Management and general direction of the entire construction work performed by contractors whose separate bids will be offered to the Owner.

REQUIREMENTS FOR FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

Those firms requested to submit proposals are cautioned that participating Federal funds require that all contracts between the Owner and contractors, and between the contractors and lesser tiers of subcontractors, for work on this project shall require compliance of all parties thereto with provisions of U.S. Department of Health, Education, and Welfare Form HEW 514, titled DHEW Requirements for Federally Assisted Construction Contracts Regarding Labor Standards and Equal Employment Opportunity.

AWARD OF CONTRACT

The Owner intends to enter into Part A of the Form of Construction Manager's Agreement with the Firm or Individual submitting the proposal which, in the judgement of the Owner, is most advantageous to the Owner, price and other factors considered. Part A of the Form of Construction Manager's Agreement will be limited to services of design consultation (including the implementation of a Management Control System) until bids for all construction work are received and binds the Construction Manager to performance of Part B of the Form of Construction Manager's Agreement, upon obtaining bids for the separate parts of the construction work within the Owner's available funds, provided such action is considered in the Owner's best interest.

THIS FORM IS A GUIDE AND SHOULD NOT BE USED WITHOUT BEING ADAPTED TO THE PARTICULAR NEEDS OF THE INDIVIDUAL PROJECT.

FACILITIES ENGINEERING AND CONSTRUCTION AGENCY

**GUIDE FORMS FOR USE ON DHEW FEDERALLY
ASSISTED CONSTRUCTION MANAGEMENT CONTRACTS**

**THESE FORMS ARE FOR THE USE OF CONSTRUCTION
MANAGEMENT FIRMS SUBMITTING PROPOSALS ON
TYPE I OR TYPE II CONSTRUCTION MANAGEMENT
CONTRACTS.**

CONSTRUCTION MANAGER'S PROPOSAL FORM

Exhibit 3

THIS FORM IS A GUIDE AND SHOULD NOT BE USED WITHOUT BEING
ADAPTED TO THE PARTICULAR NEEDS OF THE INDIVIDUAL PROJECT.

FORM OF CONSTRUCTION MANAGER'S PROPOSAL

DATE: _____

(Owner)

(Name of Facility)

(Address)

(City, State, Zip)

Gentlemen:

THE UNDERSIGNED, doing business under the name of _____
_____,

having examined the invitation for proposal documents prepared by

(Architect)

which documents consist of Parts A & B of the Form of Construction Manager's Agreement and the Program of Requirements and having examined the invitation for proposals, this form of proposal, hereby agrees to furnish all services and other items required to perform and complete all the work described by these contract documents according to the conditions prescribed therein for the following considerations:

1. For services specified under Part A, Article 1, of the Form of Construction Manager's Agreement, and to continue for a duration of time as defined in Part A, Article 3, of the Agreement; which services will be by approved qualified personnel;

the stipulated sum of: _____

Dollars (\$ _____).

2. For services specified under Part A, Article 2, "Management Control System (MCS)," the stipulated sum of _____
Dollars (\$ _____).

3. For services during construction, as defined under Part B, Article 4, "Construction Manager's Tasks,"
the stipulated sum of _____
Dollars (\$ _____).

PROJECT CONSTRUCTION SCHEDULE

A maximum construction period of _____ months is envisaged. Every effort shall be made to reduce this figure by optimum scheduling of work sequences.

GUARANTEE: The undersigned guarantees his proposal for a period of 60 days from date designated for receipt of proposals and agrees that he may not withdraw his proposal during this period.

CLASSIFICATION OF INDIVIDUALS OR FIRMS SUBMITTING PROPOSALS (Type or print answers to classification below which defines the Bidder's type of organization; furnish all information required for appropriate classification):

This Proposal is Submitted By:

AN INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

(Firm Name)

A PARTNERSHIP

(Partnership Name)

Names of all Partners:

A CORPORATION

(Full Name of Corporation)

Incorporated in State of _____

A JOINT VENTURE

(Full Name of Joint Venture)

Joint Venture is incorporated in State of ()

Workmen's Compensation Insurance is placed with:

Public Liability and Property Damage Liability Insurance is placed with:

EXECUTION OF CONTRACT: If written notice of acceptance of this proposal is mailed, telegraphed, or delivered to the undersigned within the time stated in the Invitation for proposals for Construction

Manager, or any time thereafter before this proposal is withdrawn, the Undersigned shall, within 10 calendar days after the date of receipt of such written notice, execute and deliver Part A of the Form of Construction Manager's Agreement as issued with the invitation for proposals document.

SIGNATURE (Affix Corporate Seal if incorporated);

Signed _____

Title _____

Signed _____

Title _____

Name of Firm, Partnership, or Corporation:

Business Address

Mailing address to which notice of acceptance may be mailed or telegraphed:

**THIS FORM IS A GUIDE AND SHOULD NOT BE USED WITHOUT BEING
ADAPTED TO THE PARTICULAR NEEDS OF THE INDIVIDUAL PROJECT.**

FACILITIES ENGINEERING AND CONSTRUCTION AGENCY

**GUIDE FORMS FOR USE ON DHEW FEDERALLY
ASSISTED CONSTRUCTION MANAGEMENT PROJECTS**

**THESE FORMS ARE FOR USE IN AWARDING CON-
STRUCTION MANAGEMENT CONTRACTS WITHOUT
GUARANTEED MAXIMUM PRICE - TYPE I**

PART A - CONSTRUCTION MANAGER'S CONSULTATION SERVICES CONTRACT

**PART B - CONSTRUCTION MANAGER'S FEE PLUS SERVICES CONTRACT
DURING CONSTRUCTION**

Exhibit 4

PART A CONSTRUCTION MANAGER'S CONSULTATION SERVICES CONTRACT

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- 1.5 Construction Contract Documents**
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Article 2 Management Control System

- 2.1 Objective**
- 2.2 Nature and Scope of Services to be Performed**
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Article 6 Termination

THIS FORM IS A GUIDE AND SHOULD NOT BE USED WITHOUT BEING ADAPTED TO THE PARTICULAR NEEDS OF THE INDIVIDUAL PROJECT.

FORM OF CONSTRUCTION MANAGER'S AGREEMENT

PART A

THIS AGREEMENT, entered into this _____ day of _____,

19____, is by and between _____

_____, hereinafter called the OWNER, and _____

_____, hereinafter called the CONSTRUCTION MANAGER:

WHEREAS the Owner intends to erect _____

_____, hereinafter called the PROJECT, according to construction

contract documents to be prepared by _____

_____, hereinafter called the ARCHITECT: and

WHEREAS the primary purpose and intent of this agreement is to secure the services of a construction manager to provide design consultation on the project to assure that the project costs will remain within established budget limitations; that the project will be scheduled efficiently for both design development and construction phases to be ready for occupancy at the earliest possible date; and that the design of the project will be such that the most efficient use of materials and methods will be employed to provide quality construction at the least cost; now

THEREFORE, the Owner and the Construction Manager agree as follows:

Article 1: CONSTRUCTION MANAGER'S TASKS

1.1 Review of Plans and Specifications

Review all plans and specifications during the design development and advise on site, foundations, systems and materials, construction feasibility, availability of labor and materials, time requirements for procurement, installation and construction costs, and provide recommendations for economies as appropriate.

1.2 Technical Proposals

Participate with the Architect, as a consultant, in the preparation of performance specifications and requests for technical proposals for the procurement and installation of systems components of the construction and for procurement of long lead time equipment and materials. The Construction Manager shall issue requests for technical proposals to qualified sources and shall receive proposals and assist in their evaluation. He shall conduct formally advertised procurements by preparing the contractual documents and issue invitations for bids. He shall prepare the documents and be ready to execute the several contracts immediately upon notification to proceed with PART B of this agreement..

1.3 Cost Consultation & Material Quantities List

1.3.1 The Construction Manager shall provide a continuous cost consultation service for the duration of this agreement and shall prepare, and be responsible for, all procurement and construction cost estimates. He shall prepare preliminary estimates as requested in support of the design process and shall prepare final cost estimates for all early procurement of equipment and materials; for all systems components contracts; and for all out-of-system construction work. The Construction Manager shall notify the Owner whenever the estimated construction cost is tending to exceed the budget or whenever the design is such as to preclude meeting the completion schedule.

1.3.2 A material quantities list shall be prepared for each separate bidding document package. The material quantities lists shall be incorporated in the bidding documents and may be utilized by the bidders in preparation of their bids on the project. The quantities shown on the material quantities list shall be provided for informational purposes only and are not guaranteed by the Owner to be a precise measurement of the quantities of material required for completion of the work.

1.4 Long Lead Time Procurement

Identify, recommend for purchase, and expedite the procurement of equipment, materials and supplies which require long lead time in order to ensure delivery when needed in the construction.

1.5 Construction Contract Documents

Make recommendations to the Owner regarding the division of work into separate contracts to effect economy and permit phasing of procurement and construction. He shall consider such factors as type and scope of work, time of performance, availability of labor and materials, community relations, factory vs on-site production costs, shipping costs and size limitations, building code restrictions, and other limiting factors.

1.6 Interfacing Separate Contracts

Review plans, specifications and schedules for the project to eliminate conflict and overlap of jurisdiction between separate contractors, and to ensure that all work which can most advantageously be contracted for separately, is so accomplished.

1.7 Job Site Facilities

Review the specifications to ensure that they contain provision for all temporary facilities necessary to enable contractors to perform their work, and provisions for all of the job site facilities necessary to manage, inspect and supervise construction.

1.8 Bidding Documents and Data

Review the bidding documents with the Architect, assemble bid data and advertise for competitive bids on appropriate segments of construction, including procurement of equipment, materials and supplies purchased under separate requisition.

1.8.2 Conduct, with the Architect, pre-bid conferences to inform prospective bidders of requirements and to clarify questions. Receive, jointly with the Owner and the Architect, the bids, evaluate and recommend award or rejection. It is understood that no contract may be awarded until bids have been received on all major portions of the work.

Article 2: MANAGEMENT CONTROL SYSTEM

2.1 Objective

To implement a management control system (MCS) for the design and construction of the project using both manual and automated procedures to support such functions as planning, organizing, coordinating, scheduling, budgeting, reporting construction progress and expenditures, accounting, documentation, identifying variances and problems, decision making, and decision implementation. The data provided by this management control system must be timely, must be responsive to the needs of management at all levels and must be fully capable of providing a sound basis for management decisions.

2.2 Nature and Scope of Services to be Performed

2.2.1 Implement a management control system with three major subsystems, for use in meeting the objectives of the project in a timely, economical and acceptable manner; provide the services, facilities, and support equipment necessary to implement the MCS on the project.

2.2.2 Insure that the MCS is fully compatible with existing systems with which it must interface.

2.2.3 Furnish the Owner with the records, system descriptions, procedural manuals, computer programs, test results, and other documentation for all elements of the MCS that the Owner may require. All ADP documentation, including design, programming, and console operating instructions, will be at a level of detail to permit adoption and maintenance by an organization other than the Construction Manager.

2.3 Planning and Progress Monitoring Subsystem

2.3.1 Produce a schedule for accomplishing the project design effort that coordinates and integrates the activities of all the firms participating in the design phase of the project.

2.3.2 Produce a preliminary construction schedule for initial review and approval.

2.3.3 Produce a final construction schedule that integrates the various construction contractors' and subcontractors' plans into one complete and realistic schedule.

- 2.3.4 Provide for an occupancy schedule prepared in coordination with the Owner.
- 2.3.5 Produce a complete, realistic and detailed master plan for the entire project, including time-phased schedules and resource allocations which fully meet the stated cost/schedule objectives. This plan will form the approved schedule against which expenditures and progress will be measured.
- 2.3.6 Provide for the periodic collection of data on schedule progress to date for each activity in work.
- 2.3.7 Identify the variances between estimated completion dates and scheduled completion dates.
- 2.3.8 Display the effect which these schedule variances will have on the critical path and on the scheduled completion date of the total project.
- 2.3.9 Provide for the periodic collection of proposed changes in the approved schedule for all uncompleted tasks.

2.4 Budget Control and Accounting Subsystem

- 2.4.1 Provide for the periodic collection of proposed changes in the approved budget for all uncompleted tasks. The proposed but unapproved new budget figure is identified as the "current working estimate."
- 2.4.2 Identify variances between "current working estimate" and the approved budget. These variances are project cost overruns (underruns).
- 2.4.3 Display project cost overruns (underruns) in both detailed and summary form.
- 2.4.4 Provide cash flow reports and forecasts and other timely accounting reports.
- 2.4.5 Automate the central construction purchase order activities.
- 2.4.6 Provide for the periodic collection of all actual costs to date for each activity which is in work.

2.5 Documentation and Historical Subsystem

- 2.5.1 Automate the processing of shop drawings and record drawings.
- 2.5.2 Provide documentation of all changes made in the approved schedule and approved budget so that complete traceability is maintained between the original plan (schedule and budget) and the latest approved plan.
- 2.5.3 Provide a complete record on each construction activity in the plan showing (a) how much time the activity actually took to accomplish, and (b) how much it actually cost to complete.

2.6 Reports

- 2.6.1 The MCS, when fully implemented, will generate the basic data necessary for effective control of the overall construction program. The data displays and reports will be structured to meet the requirements of management. These data displays and reports will be provided to management in summary form which will allow for management by exception. Reports will be provided to subordinate levels of management in sufficient detail consistent with their respective requirements and responsibilities.

2.7 Field Operation Manual

Prepare and publish a field operation manual to implement the administration of the work under the terms of the Construction Manager's agreement - Part B. The manual shall include the following data:

- .1 Directory of Personnel
- .2 Correspondence
- .3 Reports and Records
- .4 Inspection Procedures
- .5 Shop Drawing Submittal
- .6 Testing Laboratories Procedures
- .7 Contract Changes
- .8 Extensions of Time
- .9 Progress Payments
- .10 Final Acceptance Procedures
- .11 Additional Instructions

Article 3: CONTINUING CONSULTATION

The Construction Manager's consultation services under Part A of this Agreement shall continue until the final actual price of construction is established; i.e., until bids for all construction work are received. Such consultation services shall be compensated for under Part A of this Agreement irrespective of the Owner's decision to enter into a contract for Part B of this Agreement.

Article 4: EXECUTION OF PART B OF THIS AGREEMENT

It is the Owner's intent to enter into Part B of this Agreement with the undersigned providing the Construction Manager's performance under Part A of this Agreement is judged, by the Owner, to be satisfactory. The Construction Manager agrees to enter into Part B of this Agreement on the basis of his proposal to the Owner dated _____.

Article 5: CONSTRUCTION MANAGER'S COMPENSATION

5.1 The Owner will pay the CM as total compensation for services under Article 1 of this agreement the fee of:

_____ Dollars (\$ _____)

5.2 The Owner will pay the CM as total compensation for the implementation of a Management Control System, as specified under Article 2 of this agreement, the fee of:

_____ Dollars (\$ _____)

5.3 Payments under this agreement will be made for services under Part A, Article 1, after receipt of properly executed requests for payments as follows:

5.3.1 25% of the fee shown in paragraph 5.1 upon completion and acceptance of the services required to complete the preliminary drawings and specifications for the project.

5.3.2 25% of the fee shown in paragraph 5.1 upon completion and acceptance of the services required to develop the working drawings and specifications to 50% completion.

5.3.3 25% of the fee shown in paragraph 5.1 upon completion and acceptance of services required to develop the working drawings and specifications to 100% completion.

5.3.4 Upon satisfactory completion and acceptance of all design phase services specified under Article 1, the CM shall be paid the balance due under paragraph 5.1 of this agreement.

5.3.5 Upon satisfactory completion and acceptance of the services specified in Article 2, Management Control System, the CM shall be paid 100% of the amount due under paragraph 5.2.

Article 6: TERMINATION

The Owner may, at its option, terminate this Agreement by giving the Construction Manager written notice of such termination and paying the Construction Manager for all services rendered to date of termination. Payment will be based upon the nearest level of completion specified in Article 5. Prior to payment, the Construction Manager shall furnish the Owner with a release of all claims against the Owner, other than claims in stated amounts as may be specifically excepted by the Construction Manager from the operation of the release.

THE OWNER AND THE CONSTRUCTION MANAGER have, on the day, month and year first above written, executed this Agreement in _____ counterparts, each of which shall, without proof or accounting for the other counterparts, be deemed an original thereof.

OWNER

Signature: _____
Printed: _____

Title: _____

Date: _____

CONSTRUCTION MANAGER

Signature: _____
Printed: _____

Title: _____

License No.: _____

THIS FORM IS A GUIDE AND SHOULD NOT BE USED WITHOUT BEING
ADAPTED TO THE PARTICULAR NEEDS OF THE INDIVIDUAL PROJECT.

PART B CONSTRUCTION MANAGER'S FEE PLUS SERVICES CONTRACT DURING CONSTRUCTION

Article 1 Construction Manager's Performance and Payment Bond

Article 2 Competitive Bidding

Article 3 Recommendations and Communications

Article 4 Construction Manager's Task

- 4.1 Obtaining Separate Bids**
- 4.2 Establishment of Construction Manager Organization**
- 4.3 Pre-Construction Conferences**
- 4.4 Construction Estimate Revisions**
- 4.5 Shop Drawings, Materials, and Samples**
- 4.6 Supervision of Separate Contractors**
- 4.7 Safety**
- 4.8 Labor Relations**
- 4.9 Job Site Records**
- 4.10 Changes in the Work**
- 4.11 Payments to the Separate Contractors**
- 4.12 Storage of Pre-Bid Materials and Equipment**

Article 5 General Condition Items

- 5.1 Definition**
- 5.2 Reimbursable Costs of General Condition Items**
- 5.3 Personnel per diem Rate Schedule**

Article 6 Adjustment for Changes in Service

Article 7 Suspension of Work - Delays

Article 8 Arbitration

Article 9 Termination

Article 10 Time for Completion

Article 11 Construction Manager's Compensation

FORM OF CONSTRUCTION MANAGER'S AGREEMENT

PART B

THIS AGREEMENT, entered into this _____ day of _____, 19_____,
is by and between _____
_____, hereinafter called the **OWNER**, and _____
_____, hereinafter called the **CONSTRUCTION MANAGER**.

WHEREAS the Owner intends to contract _____
_____, hereinafter called the **PROJECT**, according to construction contract documents prepared by _____

_____, hereinafter called the **ARCHITECT**: which documents are titled: _____

are identified by the Project Number _____, are listed with dates for each in the General Conditions; and

WHEREAS the Owner desires the services of a Construction Manager to organize and direct the complete
construction of the Project within the prescribed budget estimate and time limitations for the stipulated
fee of _____
_____, Dollars (\$ _____)).

The cost of General Condition Items as defined in Article 5 is estimated not to exceed the amount of

_____ Dollars (\$ _____)).

The Cost of the work to be performed by Separate Contracts is estimated not to exceed the amount of

_____ Dollars (\$ _____)).

THEREFORE, the Owner and the Construction Manager agree as follows:

Article 1 Construction Manager's Performance and Payment Bond

Upon notice that the Owner elects to proceed with Part B of this Agreement, the Construction Manager shall post performance and payment bonds each in the amount of 100% of the estimated cost of the General Conditions items, and on written notice shall, as an agent of the Owner, immediately proceed to administer those contracts for which acceptable bids are in hand and as provided under Article 2 of this Agreement.

Article 2 - Competitive Bidding

- 2.1 The bidding on construction contracts must be conducted so as to achieve maximum competition among qualified bidders in order to obtain the most reasonable price for acceptable work. Therefore, competitive bidding by public advertising is the preferred method of contracting.
- 2.2 When public advertising is used as the method of solicitation the Construction Manager must:
 - .1 Place the advertisement in newspapers, trade journals, and/or such other media having wide circulation among prospective bidders; and
 - .2 Allow adequate time for contractors to prepare bids. Normally 30 days is considered reasonable.
- 2.3 Competitive bids may also be obtained by selective solicitation. When the selective solicitation method of bidding is used, the Construction Manager must:
 - .1 Establish reasonable prequalification standards for bidders which shall be included in the "Information for Bidders" document.
 - .2 Solicit by written invitation and receive positive bid responses from three or more contractors. Should less than three responsive bids be received, the project shall be publicly advertised as described in paragraphs A(1) and (2) above.
 - .3 Consider bids from any contractor who requests permission to bid and who is determined by the Applicant to meet bidding prequalification requirements set forth in the "Information for Bidders" document.
- 2.4 Award of construction contracts shall be made to the lowest responsible bidder whose bid is responsive to the bid invitation.
- 2.5 The general function of the Construction Manager is to serve as the Owner's representative with responsibility directly to the Owner. His employment should be such to preclude any conflict of interest. In particular, the Construction Manager shall avoid bidding work in competition with bidding contractors. Therefore, neither the Construction Management firm nor any firm in which a principal stockholder or member of the Construction Management firm has a financial interest, shall during the term of the contract, make or cause to be made any bid for construction work of the project referred to in the Construction Manager's contract.

Article 3 - Recommendations and Communications

All recommendations and communications by the Construction Manager to the Owner and the Architect that will affect the conditions of this agreement as to cost, time, quality, or project scope, shall be made or confirmed in writing.



Article 4 - Construction Manager's Tasks

4.1 Obtaining Separate Bids

- 4.1.1** Conduct with the Architect pre-bid conferences to inform prospective bidders of requirements and clarify questions concerning the bidding requirements for those parts of the work which have not been bid under Part A of this Agreement. Receive jointly with the Owner and the Architect the bids, evaluate and recommend award or rejection.
- 4.1.2** Accept delegation of authority by the Owner to act as the Owner's Agent in exercising the Owner's rights as to the management and supervision of the entire work pursuant to such rights as are set forth in each of his separate contracts and consistent with Part B of this Construction Management Agreement.
- 4.1.3** Participating Federal funds in this project require that all construction contracts between the Owner and Contractors, between the Construction Manager and Contractors and between Contractors, Subcontractors and lesser tiers of Subcontractors for work on this project shall require compliance of all parties thereto with provisions of U.S. Department of Health, Education and Welfare FORM HEW-514 titled—

DHEW REQUIREMENTS FOR FEDERALLY ASSISTED CONSTRUCTION CONTRACTS REGARDING LABOR STANDARDS AND EQUAL EMPLOYMENT OPPORTUNITY

4.2 Establishment of Construction Manager Organization

- 4.2.1** Establish organization and lines of authority required to carry out requirements of this Agreement in order to organize and direct the complete construction of the Project. A list of personnel, approved by the Owner, is included as a separate attachment to this agreement, and shall be the key personnel to be used on the project.
- 4.2.2** Under the basic fee the Construction Manager will furnish the services of the key personnel named in the list of personnel attached hereto, at time and date of the execution of this Part B of the CM Contract. No substitution of any of the key personnel will be made by the Construction Manager without the prior written consent of the Owner. Before any such substitution, the Construction Manager shall submit to the Owner a detailed justification supported by the qualifications of any proposed replacement.
- 4.2.3** The services to be performed hereunder shall be performed by the Construction Manager's own staff, unless otherwise authorized by the Owner. The employment of, contract with, or use of the services of any other person or firm by the Construction Manager, as consultant or otherwise, shall be subject to the prior written approval of the Owner. Such approval shall not be construed as constituting an agreement between the Owner and any such person or firm.
- 4.2.4** All services under the contract shall be performed in a competent and professional manner. The Owner may, in writing, require the Construction Manager to remove from the work any employee the Owner deems incompetent, careless, or otherwise objectionable and replace any such employee with suitable personnel.

4.3 Pre-Construction Conferences

Conduct pre-construction conferences with successful bidders. Schedule and conduct meetings to be attended by the Separate Contractors and representatives of the Owner and Architect to discuss such matters as procedures, progress, problems, scheduling, and equal employment opportunity. The Construction Manager shall take, transcribe, and distribute minutes of such meetings to principals in attendance.

4.4 Construction Estimate Revisions

- 4.4.1** Revise and refine construction estimates as construction proceeds, and as required to incorporate approved changes to the Project as they occur. The Construction Manager shall advise the Architect and the Owner whenever construction costs deviate from the costs set forth in the itemized current working estimate.
- 4.4.2** Where it is agreed that the approved change constitutes a change in scope of the project, the current working estimate shall be adjusted accordingly.

4.5 Shop Drawings, Materials, and Samples

Establish and implement procedures to be followed for expediting the processing and approval of shop drawings, catalogs and samples, and the scheduling of material requirements.

4.6 Supervision of Separate Contractors

- 4.6.1** Maintain a competent full-time supervision staff at the job site for the coordination and direction of the work of the Separate Contractors. Determine the adequacy of the Separate Contractor's personnel and equipment and the availability of necessary materials and supplies; take the action necessary to maintain the job schedule.
- 4.6.2** Maintain a competent full-time inspection staff at the job site for the inspection of the work of the Separate Contractors. Conduct factory inspections as required. Perform a full project inspection of the project with the Owner and the Architect at 25%, 50%, and 75% completion as well as a pre-final and final inspection.
- 4.6.3** Inspect the work of the Separate Contractors on the Project as it is being performed until final completion and acceptance of the Project to assure that the materials furnished and work performed are in accordance with the working drawings, specifications, and other contract documents and that the work on the Project is progressing on schedule. In the event an interpretation of the meaning and intent of the plans and specifications becomes necessary during construction, the Construction Manager shall consult with the owner and the Architect, obtain the interpretation in writing, and transmit same to the appropriate Separate Contractor.

4.7 Safety

Review the safety program as developed by each of the Separate Contractors, make recommendations to the Owner regarding a comprehensive Project safety program, and require each Separate Contractor to adhere to such program. (The performance of such services by the Construction Manager shall not relieve the Separate Contractors of their responsibilities for the safety of persons and property, and compliance with all statutes, rules, regulations and orders applicable to the conduct of the work as set forth in the General Conditions.)

4.8 Labor Relations

Make recommendations and render assistance as necessary for the development and administration of an effective labor relations program for the Project and the avoidance of labor disputes during construction.

4.9 Job-Site Records

- 4.9.1** Maintain at the job site on a current basis records of all contracts including: shop drawings; samples, purchases, subcontracts; materials; equipment; applicable handbooks; Federal, commercial and technical standards and specifications; and any other related documents and revisions thereto which arise out of this contract or the construction work. Prior to final payment, the records will be delivered to the Owner.
- 4.9.2** Maintain cost accounting records in accordance with management control system developed under Part A with respect to portions of the work to be performed by change orders or otherwise on a time and materials, unit cost, or similar basis requiring the keeping of records and computation therefrom.
- 4.9.3** Keep accurate and detailed written records of the progress of the project during all stages of construction; submit monthly written progress reports to the Owner including, but not limited to, information concerning the work of each of the Separate Contractors, the percentage of completion and the number and amount of change orders. Maintain a daily detailed log of all events occurring on the job site or connected with progress of the project. The log shall be open to the Owner and the Architect at all times and shall be turned over to the Owner at the completion of the construction.
- 4.9.4** Maintain copies of the Critical Path Schedule at the job site to reflect current conditions and provide copies to the Owner with periodic reports as to deviations from the schedule, the causes of the deviations, and the corrective action taken.
- 4.9.5** Maintain at the job site a current marked set of working drawing prints and specifications. Upon completion of construction, turn over the marked set to the Architect for correction of the original drawings.
- 4.9.6** Furnish certified records in duplicate of building and approach lines; elevations of bottoms of footings, floor levels, and approaches made as the work progresses. Each record shall be certified by representatives of both the Owner and the Architect.

4.10 Changes in the Work

- 4.10.1** After consultation with the Architect, make recommendations to the Owner for such changes in the work as the Construction Manager may consider necessary or desirable.
- 4.10.2** Review all requests for changes including the drawings and specifications therefor, consult with the Architect and submit recommendations to the Owner.
- 4.10.3** Implement the Owner's procedure, document, and administer the processing of change orders for the Separate Contractors as set forth in the General Conditions.

4.11 Payments to the Separate Contractors

Review and process all applications by the Separate Contractors for progress payments and final payments and make recommendations to the Owner for approval thereof. Upon approval, if duly authorized, make payment to the Separate Contractors.

4.12 Storage of Pre-Bid Materials and Equipment

Accept receipt of, and provide storage and protection for, pre-bid materials and equipment until turned over to the Separate Contractors for installation.

Article 5 - General Condition Items

5.1 **Definition** - General condition items include, but are not limited to the following: watchmen; temporary toilets; temporary fencing; sidewalk bndges; first aid station; temporary elevator; signs; safety barricades; waterboys; cleaning; trucking; temporary heat, water and electricity; temporary protective enclosures; field office and its related costs, equipment, and furnishings; subsoil exploration; refuse disposal; field and laboratory tests of concrete, steel, and soils; surveys, bench marks and monuments.

5.2 Reimbursable Costs for General Condition Items

5.2.1 Costs and expenses (exclusive of profit and overhead) for which reimbursement may be authorized in advance in writing by the Owner shall include, among other items, the following:

- .1 The costs of job site materials used in providing the general condition items.
- .2 The costs of job site labor used in providing the general condition items, including the salaries of foreman and other employees while engaged on the Project (but excluding salaries of general supervisory employees, the Construction Executive, the Construction Superintendent, or officers, whose costs have been provided for in the Construction Manager's Fee) subject to the prior approval of the Owner of all job site personnel, including the number of such personnel, their job classifications and salaries.
- .3 Payroll charges for job site personnel, such as FICA and other payroll taxes, workmen's compensation, disability benefits and unemployment insurance as required by law, and wage supplements paid to labor organizations in accordance with current labor agreements; vacation expense and sick leave allowances for such personnel not covered by labor agreements shall be reimbursed in accordance with the policy and trade practices applicable to wages or salaries paid to such employees for work in connection with the Project, subject to the prior approval of the Owner; provided, however, the Construction Manager must comply with the Labor Standards Provisions applicable to the contract.
- .4 The cost of plant equipment owned by the Construction Manager at rental rates to be determined by the Owner in accordance with established principles for the derivation of costs of plant properly chargeable to job-site operations. The Construction Manager may furnish its own plant and equipment. For these purposes the rental rate on self-owned equipment shall be as listed in the Associated Equipment Distributor's publication of Nationally Averaged Rates for the appropriate year, for the particular item of equipment, and any item of equipment required for a period of less than one month shall be prorated accordingly. However, the total amount of rental to be allowed by the Project Manager hereunder for any item of self-owned equipment shall not exceed the fair market value of such item at the time of its first use on the Project.
- .5 Rental costs of equipment rented from others; provided, however, that every agreement under which the Construction Manager rents equipment from others shall contain an option or options for the Construction Manager's purchase of such equipment, if available. A copy of each such agreement shall be filed promptly with the Owner. The Construction Manager shall exercise any such option at the request of the Owner. In such event the Owner shall reimburse the Construction Manager for such purchase price and the Construction Manager shall dispose of such equipment as directed by the Owner and shall credit the proceeds thereof to the Owner.
- .6 Transportation costs on equipment and materials.
- .7 Restricted quantities of small tools and supplies, which shall include among other items, all fire extinguishers and all special and protective wearing apparel.

- .8 The cost of fuel and lubricants, power, light, water and telephone service if not provided directly by the Owner.
- .9 The cost of premiums on public liability, property damage or other insurance coverage authorized or required by the Owner.
- .10 The amount of all sales and use taxes paid by the Construction Manager in connection with general condition items to be provided by it.
- .11 The amounts paid in accordance with subcontracts for General Condition items approved in advance by the Owner.
- .12 The cost of all required permits and licenses.
- .13 The cost of performance and payment bonds.
- .14 Provided, however, that on all of the aforesaid items the Owner shall be credited with (i) such discounts of invoices as may be obtainable; (ii) the salvage value of materials charged to the Owner and taken over by the Construction Manager for its use or sale when no longer needed by it in its performance of this agreement; and (iii) any rebates, refunds, return deposits or other allowances properly credited to the Construction Manager's reimbursable costs and expenses hereunder.

5.3 Personnel hourly rate schedule

- 5.3.1 A personnel hourly rate schedule shall be appended to this agreement. This rate schedule shall be prepared by the Construction Manager and approved by the Owner and shall include the following data:
 - .1 A classification for each category of labor to be employed by the Construction Manager in performance of the General Condition items.
 - .2 A specific rate for reimbursement of labor expended under each classification of labor in the performance of the General Condition items.
- 5.3.2 The personnel hourly rate schedule shall be used in determining the reimbursable amount due the Construction Manager in performance of General Condition items. The personnel hourly rate schedule shall not include the rates for officers, general supervisory employees, the Construction Executive, the Construction Superintendent, or engineering staff which have been provided for in the Construction Manager's fee to organize and direct the complete construction of the project.

Article 6 - Adjustment for Changes in Services

The Owner may, at any time, by written order, make changes within the general scope of this contract in the services to be performed. If such changes cause an increase or decrease in the Construction Manager's cost of performance of any services under this contract, whether or not changed by any order, an equitable adjustment of the fee shall be made and the contract shall be modified in writing accordingly. Any claim of the Construction Manager for adjustment must be asserted in writing within 30 days from the date of receipt by the Construction Manager of the notification of change unless the Owner grants a further period of time before the date of final payment under this contract. No services for which an additional cost or fee will be charged by the Construction Manager shall be furnished without prior written authorization of the Owner.

Article 7 - Suspension of Work - Delays

The Owner may order the Construction Manager in writing to suspend, delay, or interrupt all or any part of the work in the project for such period of time as he may determine to be appropriate for the convenience of the Owner.

If the performance of all or any part of the work on the project is, for an unreasonable period of time, suspended, delayed, or interrupted by an act of the Owner in the administration of the project, an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by such unreasonable suspension, delay or interruption and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent (1) that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Construction Manager, or (2) for which an equitable adjustment is provided for or excluded under any other provision of this contract.

No claim under this clause shall be allowed (1) for any costs incurred more than 20 days before the Construction Manager shall have notified the Owner in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order), and (2), unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of such suspension, delay, or interruption, but not later than the date of final payment under the contract.

In the event work on the Project is suspended or otherwise delayed, the Owner shall reimburse the Construction Manager for the costs of his full job site staff as provided for by this Agreement for the first 30 days of such delay. The Construction Manager shall reduce the size of his job site staff for the remainder of the delay period as directed by the Owner and, during such period, the Owner shall reimburse the Construction Manager for the costs of such reduced staff plus an amount not to exceed 30% for related payroll, taxes, insurance, pensions, and fringe benefits. Upon the termination of the delay the Construction Manager shall restore its job site staff to its former size, subject to the approval of the Owner.

Article 8 - Arbitration

Any controversy arising out of or relating to this Agreement or the breach thereof shall be settled by arbitration in accordance with the rules then obtaining of the American Arbitration Association and judgment upon the award may be entered in any court having jurisdiction thereof.

Article 9 - Termination

The Owner, with or without cause, may terminate all or any portion of the services to be performed by the Construction Manager under this Agreement, or any additions or modifications thereof, upon giving the Construction Manager 30 days written notice of such termination. In the event of termination, the Construction Manager shall deliver to the Project Manager all reports, estimates, schedules and other documents and data prepared pursuant to this Agreement.

The Construction Manager shall be entitled to receive payments for services provided to date of termination (including payment for the period of the 30 day notice) plus the percent retained thereon plus reimbursement for approved reimbursable costs and expenses incurred by the Construction Manager to the date of termination. Prior to payment, the Construction Manager shall furnish the Owner with a release of all claims against the Owner, other than claims in stated amounts as may be specifically excepted by the Construction Manager from the operation of the release.

Article 10 - Time for Completion

The schedule showing required design and construction completion dates is included in Appendix attached to this Agreement and incorporated herein by reference.

Article 11 - Construction Manager's Compensation

11.1 The Owner will pay the CM as total compensation for services under Part B, Article 4, the fee of:

_____ Dollars (\$ _____)

11.2 The Owner will pay the CM, on a reimbursable basis, for services provided under Part B, Article 5, General Condition Items, an amount not to exceed the sum of:

_____ Dollars (\$ _____)

11.3 Payments will be made for services under Part B of this agreement after receipt of properly executed requests for payments as follows:

- .1 The CM will be paid monthly the fee for services performed under Article 4, on the basis of and in proportion to the percentage of total completion of construction as determined and approved by the Owner. In making such progress payments there shall be retained 10% of the amount thereof until final completion and acceptance of the construction work.
- .2 For reimbursement for General Condition Items the CM shall be paid monthly.
- .3 After completion and acceptance of all construction work and upon receipt of a release of claims pertaining to all work performed under the terms of this agreement, the retained amount due the CM shall be paid.

THE OWNER AND THE CONSTRUCTION MANAGER have, on the day, month and year first above written, executed this Agreement in ____ counterparts, each of which shall, without proof or accounting for the other counterparts, be deemed an original thereof.

OWNER

Signature: _____
Printed:

Title: _____

Date: _____

CONSTRUCTION MANAGER

Signature: _____
Printed:

Title: _____

License No.: _____

**THIS FORM IS A GUIDE AND SHOULD NOT BE USED WITHOUT BEING
ADAPTED TO THE PARTICULAR NEEDS OF THE INDIVIDUAL PROJECT.**

7/1/72

TYPE II

FACILITIES ENGINEERING AND CONSTRUCTION AGENCY

GUIDE FORMS FOR USE ON
DHEW FEDERALLY ASSISTED CONSTRUCTION MANAGEMENT PROJECTS

THESE FORMS ARE FOR USE IN AWARDING TYPE II
CONSTRUCTION MANAGEMENT CONTRACTS WITH
GUARANTEED MAXIMUM PRICE

- 1- PART A - CONSTRUCTION MANAGER'S CONSULTATION SERVICES CONTRACT
- 2- PART B - CONSTRUCTION MANAGER'S GUARANTEED MAXIMUM PRICE CONTRACT
- 3- CONSTRUCTION MANAGER'S PERFORMANCE BOND FORM
- 4- CONSTRUCTION MANAGER'S PAYMENT BOND FORM

7/1/72

TYPE II PART A

THIS FORM IS A GUIDE AND SHOULD NOT BE USED WITHOUT BEING
ADAPTED TO THE PARTICULAR NEEDS OF THE INDIVIDUAL PROJECT.

PART A

CONSTRUCTION MANAGER'S CONSULTATION SERVICES CONTRACT

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FORM OF CONSTRUCTION MANAGER'S AGREEMENT

PART A THIS FORM IS A GUIDE AND SHOULD NOT BE USED WITHOUT BEING ADAPTED TO THE PARTICULAR NEEDS OF THE INDIVIDUAL PROJECT
THIS AGREEMENT, entered into this _____ day of _____, 19_____, is by and between _____, _____, hereinafter called the OWNER, and _____, hereinafter called the CONSTRUCTION MANAGER:

WHEREAS the Owner intends to erect _____, hereinafter called the PROJECT, according to construction contract documents to be prepared by _____, hereinafter called the ARCHITECT: and

WHEREAS the primary purpose and intent of this agreement is to secure the services of a construction manager to provide design consultation on the project to assure that the project costs will remain within established budget limitations; that the project will be scheduled efficiently for both design development and construction phases to be ready for occupancy at the earliest possible date; and that the design of the project will be such that the most efficient use of materials and methods will be employed to provide quality construction at the least cost; now

WHEREFORE, the Owner and the Construction Manager agree as follows:

ARTICLE 1: CONSTRUCTION MANAGER'S TASKS

1.1 Review of Plans and Specifications

Review all plans and specifications during the design development and advise on site, foundations, systems and materials, construction feasibility, availability of labor and materials, time requirements

for procurement, installation and construction, relative costs, and provide recommendations for economies as appropriate.

1.2 Technical Proposals

Participate with the Architect, as a consultant, in the preparation of performance specifications and requests for technical proposals for the procurement and installation of systems components of the construction and for procurement of long lead time equipment and materials. The Construction Manager shall issue requests for technical proposals to qualified sources and shall receive proposals and assist in their evaluation. He shall conduct formally advertised procurements by assembling the contractual documents and issuing invitations for bids. He shall be prepared to proceed with the several contracts immediately upon notification to proceed with PART B of this agreement.

1.3 Cost Consultation & Material Quantities List

1.3.1 The Construction Manager shall provide a continuous cost consultation service for the duration of this agreement and shall prepare, and be responsible for, all procurement and construction cost estimates. He shall prepare preliminary estimates as requested in support of the design process and shall prepare final cost estimates for all early procurement of equipment and materials; for all systems components contracts; and for all out of system construction work. The Construction Manager shall notify the Owner whenever the estimated construction cost is tending to exceed the budget or whenever the design is such as to preclude meeting the completion schedule.

1.3.2 A material quantities list shall be prepared for each separate bidding document package and made a part thereof. The material quantities lists are provided for informational purposes only and are not guaranteed by the Owner to be a precise measurement of the quantities of material required for completion of the work.

1.4 Long Lead Time Procurement

Identify, recommend for purchase, and expedite the procurement of equipment, materials and supplies which require long lead time for procurement or manufacture in order to ensure delivery when needed in the construction.

1.5 Construction Contract Documents

Make recommendations to the Owner regarding the division of work into separate contracts to effect economy and permit phasing of procurement and construction. He shall consider such factors as type and scope of work, time of performance, availability of labor and materials, community relations, factory vs on-site production costs, shipping costs and size limitations, building code restrictions, and other limiting factors.

1.6 Interfacing Separate Contracts

Review plans, specifications and schedules for the project to eliminate conflict and overlap of jurisdiction between separate contractors, and to ensure that all work which can most advantageously be contracted for separately, is so accomplished.

1.7 Job Site Facilities

Review the specifications to ensure that they contain provision for all temporary facilities necessary to enable contractors to perform their work, and provisions for all of the job site facilities necessary to manage, inspect and supervise construction.

1.8 Bidding Documents and Advertisement for Bids

Review the bidding documents with the Architect, assemble bid data including copies of drawings and specifications provided by the Architect, advertise for competitive bids on appropriate segments of construction, including procurement of equipment, materials and supplies purchased under separate requisition.

1.8.2 Conduct, with the Architect, pre-bid conferences to inform prospective bidders of requirements and to clarify questions.

Receive and evaluate the bids in the presence of the Owner or his representative and award contracts.

1.9 Preparation of Guaranteed Maximum Price

On or before the date given in Article 3 of this Agreement, the Construction Manager shall prepare an itemized guaranteed maximum price for the entire project, clearly summarizing the costs for each component of the work (such as foundations, structure, skin, roof, etc.), and also identifying the dollar amount of contingency for each. Such Guaranteed Maximum Price shall be the

sum of:

1. An estimate of the cost of the General Condition Items as defined in Article 5 of PART B of this Construction Manager's Agreement, plus
2. The Construction Manager's estimate of the cost of the work to be performed by separate contract, including the cost of any required bidding and separate contract permits, fees, taxes, patents, copyrights, royalties, and performance and payment bonds, to complete construction of the project.

The Guaranteed Maximum Price shall not include such Project expenses as cost of site, site survey and investigations, professional design fees, construction testing and inspection, Owner's Project Inspector, moveable equipment, finance costs and furnishings.

1.10 Continuing Consultation

Following the preparation of the Guaranteed Maximum Price, the Construction Manager's consultation services under Part A of this Agreement shall continue until the final actual price of construction is established; i.e., until all contracts for construction are awarded and the total cost of construction is established and shall be compensated for under Part A of this Agreement irrespective of the Owner's decision to enter into a contract for Part B of this Agreement.

ARTICLE 2: MANAGEMENT CONTROL SYSTEM

2.1 Objective

To implement a management control system (MCS) for the design and construction of the project using both manual and automated

procedures to support such functions as planning, organizing, scheduling, budgeting, reporting construction progress and expenditures, accounting, documentation, identifying variances and problems, decision making, and decision implementation. The data provided by this management control system must be timely, must be responsive to the needs of management at all levels, and must be fully capable of providing a sound basis for management decisions.

2.2 Nature and Scope of Services to be Performed

2.2.1 Implement a management control system with three major subsystems, for use in meeting the objectives of the project in a timely, economical and acceptable manner and provide the services facilities and support equipment necessary to implement the MCS on the project.

2.2.2 Ensure that the MCS is fully compatible with existing systems with which it must interface.

2.2.3 Furnish the Owner with the records, system descriptions, procedural manuals, computer programs, test results, and other documentation for all elements of the MCS that the Owner may require. All ADP documentation, including design, programming, and console operating instructions, will be at a level of detail to permit adoption and maintenance by an organization other than the Construction Manager.

2.3 Planning and Progress Monitoring Subsystem

2.3.1 Produce a schedule for accomplishing the project design effort that coordinates and integrates the activities of all the firms

participating in the design phase of the project.

- 2.3.2 Produce a preliminary construction schedule for initial review and approval.
- 2.3.3 Produce a final construction schedule that integrates the various construction contractor's plans into one complete and realistic schedule.
- 2.3.4 Provide for an occupancy schedule prepared in coordination with the Owner.
- 2.3.5 Produce a complete, realistic and detailed master plan for the entire project, including time-phased schedules and resource allocations which fully meet the stated cost/schedule objectives. This plan will form the approved budget and approved schedule against which expenditures and progress will be measured.
- 2.3.6 Provide for the periodic collection of data on schedule progress to date for each activity in work.
- 2.3.7 Identify the variances between estimated completion dates and scheduled completion dates.
- 2.3.8 Display the effect which these schedule variances will have on the critical path and on the scheduled completion date of the total project.
- 2.3.9 Provide for the periodic collection of proposed changes in the approved schedule for all uncompleted tasks.

2.3.10 Display the effect which the proposed schedule changes would have on key milestones and on the scheduled completion date of the total project.

2.4 Budget Control and Accounting Subsystem

2.4.1 Provide for the periodic collection of proposed changes in the approved budget for all uncompleted tasks. The proposed but unapproved new budget figure is identified as the "current working estimate."

2.4.2 Identify variances between "current working estimate" and the approved budget. These variances are project cost overruns (underruns).

2.4.3 Display project cost overruns (underruns) in both detailed and summary form.

2.4.4 Provide cash flow reports and forecasts and other timely accounting reports.

2.4.5 Provide for the periodic collection of all actual costs to date for each activity which is in work.

2.5 Documentation and Historical Subsystem

2.5.1 Automate the processing of shop drawings and record drawings.

2.5.2 Provide documentation of all changes made in the approved schedule

and approved budget so that complete traceability is maintained between the original plan (schedule and budget) and the latest approved plan.

2.5.3 Provide a complete record on each construction activity in the plan showing (a) how much time the activity actually took to accomplish, and (b) how much it actually cost to complete.

2.6 Reports

2.6.1 The MCS, when fully implemented, will generate reports necessary for effective control of the overall construction program.

Reports will be provided to management in summary form which will allow for management by exception. Reports will be provided to subordinate levels of management in sufficient detail consistent with their respective requirements and responsibilities.

2.7 Field Operation Manual

Prepare and publish a field operation manual to implement the administration of the work under the terms of the Construction Manager's agreement - Part B. The manual shall include the following data:

.1	Directory of Personnel	.7	Contract Changes
.2	Correspondence	.8	Extensions of Time
.3	Reports and Records	.9	Progress Payments
.4	Inspection Procedures	.10	Final Acceptance Procedures
.5	Shop Drawing Submittal	.11	Additional Instructions
.6	Testing Laboratories Procedures		

ARTICLE 3: TIME FOR PERFORMANCE

The Construction Manager shall submit a Guaranteed Maximum Price (GMP) for acceptance by the Owner by _____. Upon submission (date) of the GMP, the Owner shall approve or reject the offer given by the Construction Manager as to proceeding with Part B of the Construction Manager's Agreement. Should the Owner not accept the GMP offered, this Agreement may be terminated as provided in Article 6.

ARTICLE 4: EXECUTION OF PART B OF THIS AGREEMENT

Upon the Owner's acceptance of the Guaranteed Maximum Price provided under Article 1, paragraph 1.9 of this Agreement, the Construction Manager agrees to enter into Part B of this Agreement on the basis of his bid to the Owner dated _____.

ARTICLE 5: CONSTRUCTION MANAGER'S COMPENSATION

5.1 The Owner will pay the CM as total compensation for services under Article 1 of this Agreement the fee of:

Dollars (\$ _____)

5.2 The Owner will pay the CM as total compensation for the implementation of a Management Control System, as specified under Article 2 of this Agreement, the fee of:

_____ Dollars (\$_____)

5.3 In the event the parties do not enter into a guaranteed maximum price contract for the construction of the project, this Agreement may be terminated, by the owner, pursuant to Article 6.

5.4 Payments under this Agreement will be made for services under Part A, Article 1, after receipt of properly executed requests for payments as follows:

5.4.1 25% of the fee shown in paragraph 5.1 upon completion and acceptance of the services required to complete the preliminary drawings and specifications for the project.

5.4.2 25% of the fee shown in paragraph 5.1 upon completion and acceptance of the services required to develop the working drawings and specifications to 50% completion.

5.4.3 25% of the fee shown in paragraph 5.1 upon completion and acceptance of an itemized guaranteed maximum price as specified in paragraph 1.9.

5.4.4 Upon satisfactory completion and acceptance of all design phase services specified under Article 1, the CM shall be paid the balance due under paragraph 5.1 of this Agreement.

5.4.5 Upon satisfactory completion and acceptance of the services specified in Article 2, Management Control System, the CM shall be paid 100% of the amount due under paragraph 5.2.

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ARTICLE 6: TERMINATION

The Owner may, at its option, terminate this Agreement by giving the Construction Manager written notice of such termination and paying the Construction Manager for all services rendered to date of termination. Payment will be based upon the nearest level of completion specified in Article 5. Prior to payment, the Construction Manager shall furnish the Owner with a release of all claims against the Owner, other than claims in stated amounts as may be specifically excepted by the Construction Manager from the operation of the release.

THE OWNER AND CONSTRUCTION MANAGER have, on the day, month and year first above written, executed this Agreement in ____ counterparts, each of which shall, without proof or accounting for the other counterparts, be deemed an original thereof.

OWNER

CONSTRUCTION MANAGER

Signature: _____
Printed: _____

Title: _____

Date: _____

Signature: _____
Printed: _____

Title: _____

License No.: _____

THIS FORM IS A GUIDE AND SHOULD NOT BE USED WITHOUT BEING
ADAPTED TO THE PARTICULAR NEEDS OF THE INDIVIDUAL PROJECT.

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TYPE II PART B

PART B

CONSTRUCTION MANAGER'S GUARANTEED MAXIMUM PRICE CONTRACT

INDEX

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Article 2	Competitive Bidding
Article 3	Recommendations and Communications
Article 4	Construction Manager's Task
4.1	Obtaining Separate Bids
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5.1	Definition
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THIS FORM IS A GUIDE AND SHOULD NOT BE USED WITHOUT BEING
ADAPTED TO THE PARTICULAR NEEDS OF THE INDIVIDUAL PROJECT.

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FORM OF CONSTRUCTION MANAGER'S AGREEMENT

PART B

THIS AGREEMENT, entered into this _____ day of _____, 19_____, is by and between _____, hereinafter called the OWNER, and _____, hereinafter called the CONSTRUCTION MANAGER.

WHEREAS the Owner intends to erect a _____, hereinafter called the PROJECT, according to construction contract documents prepared by _____,

hereinafter called the ARCHITECT: which documents are titled: _____, are identified by the Project Number _____, are listed with dates for each in the General Conditions; and

WHEREAS the Owner desires the services of a Construction Manager to organize and direct the complete construction of the Project and to assume all risks and responsibilities of producing the Project within a Guaranteed Maximum Price.

THIS FORM IS A GUIDE AND SHOULD NOT BE USED WITHOUT BEING ADAPTED TO THE PARTICULAR NEEDS OF THE INDIVIDUAL PROJECT.

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THEREFORE, the Owner and the Construction Manager agree as follows:

ARTICLE 1 CONSTRUCTION MANAGER'S PERFORMANCE AND PAYMENT BOND

Upon notice that the Owner elects to proceed with Part B of this Agreement, the Construction Manager shall post performance and payment bonds each in the amount of 100% of the Guaranteed Maximum Price, and on written notice to proceed shall immediately accept assignment of and administer those contracts for which acceptable bids are in hand as provided under Article 2 of this Agreement.

ARTICLE 2:COMPETITIVE BIDDING

2.1 The bidding on construction contracts must be conducted so as to achieve maximum competition among qualified bidders in order to obtain the most reasonable price for acceptable work. Therefore, competitive bidding by public advertising is the preferred method of contracting.

2.2 When public advertising is used as the method of solicitation the Construction Manager must:

1. Place the advertisement in newspapers, trade journals, and/or such other media having wide circulation among prospective bidders; and
2. Allow adequate time for contractors to prepare bids. Normally 30 days is considered reasonable.

2.3 Competitive bids may also be obtained by selective solicitation.

When the selective solicitation method of bidding is used, the Construction Manager must:

1. Establish reasonable prequalification standards for bidders which shall be included in the "Information for Bidders" document.
2. Solicit by written invitation and receive positive bid responses from three or more contractors. Should less than three responsive bids be received, the project shall be publicly advertised as described in paragraphs 2.1 and 2.2 above.

3. Consider bids from any contractor who requests permission to bid and who is determined by the Applicant to meet bidding prequalification requirements set forth in the "Information for Bidders" document.
- 2.4 Award of construction contracts shall be made to the lowest responsible bidder whose bid is responsive to the bid invitation.
- 2.5 The general function of the Construction Manager is to serve as the Owner's representative with responsibility directly to the Owner. His employment should be such to preclude any conflict of interest. In particular, the Construction Manager shall avoid bidding work in competition with bidding contractors. Therefore, neither the Construction Management firm nor any firm in which a principal stockholder or member of the Construction Management firm has a financial interest, shall during the term of the contract, make or cause to be made any bid for construction work of the project referred to in the Construction Manager's contract.

ARTICLE 3: RECOMMENDATIONS AND COMMUNICATIONS

All recommendations and communications by the Construction Manager to the Owner and the Architect that will affect the conditions of this Agreement shall be made or confirmed in writing.

ARTICLE 4: CONSTRUCTION MANAGER'S TASKS

4.1 Obtaining Separate Bids

4.1.1 Conduct with the Architect pre-bid conferences to inform prospective bidders of requirements and clarify questions concerning the bidding requirements for those parts of the work which have not been bid under Part A of this Agreement. Receive jointly with the

Owner and the Architect the bids, evaluate, and recommend award or rejection.

4.1.2 Upon approval by the Owner of the low responsive and responsible bidders, award the separate contracts as required to provide all labor and material for the construction of the project, including those parts of the work which have been bid under Part A of this Agreement.

4.1.3 Participating Federal funds in this project require that all construction contracts between the Owner and Contractors, between the Construction Manager and Contractors and between Contractors, Subcontractors and lesser tiers of Subcontractors for work on this project shall require compliance of all parties thereto with provisions of U.S. Department of Health, Education, and Welfare Form HEW 514 titled "DHEW REQUIREMENTS FOR FEDERALLY ASSISTED CONSTRUCTION CONTRACTS REGARDING LABOR STANDARDS AND EQUAL EMPLOYMENT OPPORTUNITY," or the current edition of AIA Form A201 S/C.

4.2 Establishment of Construction Manager Organization

4.2.1 Establish organization and lines of authority required to carry out requirements of this Agreement in order to organize and direct the complete construction of the Project. A list of personnel, approved by the Owner, is included as a separate attachment to this Agreement, and shall be the key personnel to be used on the project.

4.2.2 Under the basic fee the Construction Manager will furnish the services of the key personnel named in the list of personnel attached hereto. No substitution of any of the key personnel will be made by the Construction Manager without the prior written consent of the

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Owner. Before any such substitution, the Construction Manager shall submit to the Owner a detailed justification supported by the qualifications of any proposed replacement.

4.2.3 The services to be performed hereunder shall be performed by the Construction Manager's own staff, unless otherwise authorized by the Owner. The employment of, contract with, or use of the services of any other person or firm by the Construction Manager, as consultant or otherwise, shall be subject to the prior written approval of the Owner. Such approval shall not be construed as constituting an agreement between the Owner and any such person or firm

4.2.4 All services under the contract shall be performed in a competent and professional manner. The Owner may, in writing, require the Construction Manager to remove from the work any employee the Owner deems incompetent, careless, or otherwise objectionable and replace any such employee with suitable personnel.

4.3 Pre-Construction Conferences

Conduct pre-construction conferences with successful bidders. Schedule and conduct meetings to be attended by the Separate Contractors and representatives of the Owner and Architect to discuss such matters of procedures, progress, problems, scheduling, and equal employment opportunity. The Construction Manager shall take, transcribe, and distribute minutes of such meetings to principals in attendance.

4.4 Construction Estimate Revisions

4.4.1 Review and refine construction estimates as construction proceeds, and as required to incorporate approved changes to the Project as

they occur. The Construction Manager shall advise the Architect and the Owner whenever construction costs deviate from the costs set forth in the itemized Guaranteed Maximum Price.

4.5 Shop Drawings, Materials, and Samples

Establish and implement procedures to be followed for expediting the processing and approval of shop drawings, catalogs and samples, and the scheduling of material requirements.

4.6 Supervision of Separate Contractors

- 4.6.1 Maintain a competent full-time supervisory staff at the job site for the coordination and direction of the work of the Separate Contractors. Determine the adequacy of the Separate Contractor's personnel and equipment and the availability of necessary materials and supplies; take the action necessary to maintain the job schedule.
- 4.6.2 It is the responsibility of the Owner to maintain an inspection staff at the job site for the inspection of the work of the Construction Manager and the Separate Contractors, and to conduct factory inspections as required. The Construction Manager will participate with the Owner and the Architect in performing a full project inspection at required intervals of completion as well as a pre-final and final inspection, and in addition shall perform routine inspections. The purpose of such inspections is to assure that the materials furnished and work performed are in accordance with the working drawings, specifications, and other contract documents and that the work on the Project is progressing

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on schedule. In the event an interpretation of the meaning and intent of the working drawings and specifications becomes necessary during construction, the Construction Manager shall consult with the Owner and the Architect, obtain the interpretation in writing, and transmit the same to the appropriate Separate Contractor.

4.7 Safety

Review the safety program as developed by each of the Separate Contractors, make recommendations to the Owner regarding a comprehensive Project safety program, and require each Separate Contractor to adhere to such program. (The performance of such services by the Construction Manager shall not relieve the Separate Contractors of their responsibilities for the safety of persons and property, and compliance with all statutes, rules, and regulations and orders applicable to the conduct of the work as set forth in the General Conditions.)

4.8 Labor Relations

Make recommendations and render assistance as necessary for the development and administration of an effective labor relations program for the Project and the avoidance of labor disputes during construction.

4. Job Site Records

- 4.1 Maintain at the job site on a current basis records of all contracts including:shop drawings; samples, purchases, subcontracts; materials; equipment; applicable handbooks; Federal, commercial and technical standards and specifications; and any other related documents and revisions thereto which arise out of this contract or the construction work. Prior to final payment, the records will be delivered to the Owner.

- 4.9.2 Maintain cost accounting records in accordance with established procedures with respect to portions of the work to be performed by change orders or otherwise on a time and materials, unit cost, or similar basis requiring the keeping of records and computation therefrom.
- 4.9.3 Keep accurate and detailed written records of the progress of the project during all stages of construction; submit monthly written progress reports to the Owner including, but not limited to, information concerning the work of each of the Separate Contractors, the percentage of completion and the number and amount of change orders. Maintain a daily detailed log of all events occurring on the job site or connected with progress of the project. The log shall be open to the Owner and the Architect at all times and shall be turned over to the Owner at the completion of the construction.
- 4.9.4 Maintain copies of the Critical Path Schedule at the job site to reflect current conditions and provide copies to the Owner with periodic reports as to deviations from the schedule, the causes of the deviations, and the corrective action taken.
- 4.9.5 Maintain at the job site a current marked set of working drawing prints and specifications to facilitate the preparation of as-built drawings.
- 4.9.6 Furnish certified records in duplicate of building and approach lines; elevations of bottoms of footings, floor levels, and approaches made as the work progresses. Each record shall be certified by representatives of both the Owner and the Architect.

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4.10 Changes in the Work

- 4.10.1 Make recommendations to the Owner after consultation with the architect for such changes in the work as the Construction Manager may consider necessary or desirable.
- 4.10.2 Review all requests for changes including the drawings and specifications therefor, consult with the Architect and submit recommendations to the Owner.
- 4.10.3 Implement the Owner's procedure, document, and administer the processing of change orders for the Separate Contractors as set forth in the General Conditions.

4.11 Payments to the Separate Contractors

Review and process all applications by the Separate Contractors for progress payments and final payments and make recommendations to the Owner for approval thereof. Upon approval, if duly authorized make payment to the Separate Contractors.

4.12 Storage of Materials and Equipment

Accept receipt of materials and equipment purchased by the Owner, provide storage and protection for materials and equipment until turned over to the Separate Contractors for installation.

ARTICLE 5: GENERAL CONDITION ITEMS

5.1 Definition

General condition items include, but are not limited to the following:

watchmen; temporary toilets; temporary fencing; sidewalk bridges; first aid station; temporary elevators; signs; safety barricades; waterboys; cleaning; trucking; refuse disposal; winter protection; temporary heat, water, and electricity; temporary protective enclosures; field office and its related costs, equipment, and furnishings; messenger service; subsoils exploration;

field and laboratory tests of concrete, steel, and soils; surveys, bench marks and monuments.

5.2 Reimbursable Costs for General Condition Items

5.2.1 Costs and expenses (exclusive of profit and overhead) for which reimbursement may be authorized in advance in writing by the Owner shall include, among other items, the following:

1. The costs of all job site materials used in providing the general condition items.
2. The costs of all job site labor used in providing the general condition items, including the salaries of foreman and other employees while engaged on the Project (but excluding salaries of general supervisory employees, the Construction Executive, the Construction Superintendent, or officers whose costs have been provided for in the Construction Manager's Fee) subject to the prior approval of the Owner of all job site personnel, including the number of such personnel, their job classifications and salaries.
3. All payroll charges for each job site personnel, such as FICA and other payroll taxes, workmen's compensation, disability benefits and unemployment insurance as required by law and wage supplements paid to labor organizations in accordance with current labor agreements; vacation expense and sick leave allowances for such personnel not covered by labor agreements shall be reimbursed in accordance with the policy and trade practices applicable to wages or salaries paid to such employees for work in connection with the Project, subject to the prior approval of the Owner; provided, however, the Contractor must comply with the Labor Standards Provisions applicable to the contract.
4. The cost of all plant equipment owned by the Construction Manager at rental rates to be determined by the Owner in accordance with established principles for the derivation of costs of plant properly chargeable to job-site operations. The Construction Manager shall furnish its own plant and equipment, if available. For these purposes the rental rate on self-owned equipment shall be as listed in the Associated Equipment Distributor's publication of Nationally Averaged Rates for the appropriate year, for the particular item of equipment, and any item of equipment required for a period of less than one month shall be prorated accordingly. However, the total amount of rental to be allowed by the Project Manager hereunder

for any item of self-owned equipment shall not exceed the fair market value of such item at the time of its first use on the Project.

5. Rental costs of equipment rented from others; provided, however, that every agreement under which the Construction Manager rents equipment from others shall contain an option or options for the Construction Manager's purchase of such equipment, if available. A copy of each such agreement shall be filed promptly with the Owner. The Construction Manager shall exercise any such option at the request of the Owner. In such event the Owner shall reimburse the Construction Manager for such purchase price and the Construction Manager shall dispose of such equipment as directed by the Owner and shall credit the proceeds thereof to the Owner.
6. Transportation costs on equipment and materials.
7. Restricted quantities of small tools and supplies, which shall include among other items, all fire extinguishers and all special and protective wearing apparel.
8. The cost of fuel and lubricants, power, light, water, and telephone service if not provided directly by the Owner.
9. The amount of all sales and use taxes paid by the Construction Manager in connection with general condition items to be provided by it.
10. The amounts paid in accordance with subcontracts for General Condition items approved in advance by the Owner.
11. Provided, however, that on all of the aforesaid items the Owner shall be credited with (i) such discounts of invoices as may be obtainable; (ii) the salvage value of materials charged to the Owner and taken over by the Construction Manager for its use or sale when no longer needed by it in its performance of this Agreement; and (iii) any rebates, refunds, returned deposits or other allowances properly credited to the Construction Manager's reimbursable costs and expenses hereunder.

5.3 Personnel Hourly Rate Schedule

5.3.1 A personnel hourly rate schedule shall be appended to this Agreement.

The rate schedule shall be prepared by the Construction Manager and shall include the following data:

1. A classification for each category of labor to be employed by the Construction Manager in performance of the General Condition items.

2. A specific rate for reimbursement of labor expended under each classification of labor in the performance of the General Condition items.

5.3.2 The personnel hourly rate schedule shall be used in determining the reimbursable amount due the Construction Manager in performance of General Condition items. The personnel hourly rate schedule shall not include the rates for officers, general supervisory employees, the Construction Executive, the Construction Superintendent, or engineering staff which have been provided for in the Construction Manager's fee to organize and direct the complete construction of the project.

ARTICLE 6: ADJUSTMENT FOR CHANGES IN SERVICES

The Owner may, at any time, by written order, make changes within the general scope of this contract in the services to be performed. If such changes cause an increase or decrease in the Construction Manager's cost of performance of any services under this contract, whether or not changed by any order, an equitable adjustment of the fee shall be made and the contract shall be modified in writing accordingly. Any claim of the Construction Manager for adjustment must be asserted in writing within 30 days from the date of receipt by the Construction Manager of the notification of change unless the Owner grants a further period of time before the date of final payment under this contract. No services for which an additional cost or fee will be charged by the Construction Manager shall be furnished without prior written authorization of the Owner.

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ARTICLE 7: SUSPENSION OF WORK - DELAYS

The Owner may order the Construction Manager in writing to suspend, delay, or interrupt all or any part of the work on the project for such period of time as he may determine to be appropriate for the convenience of the Owner.

If the performance of all or any part of the work on the project is, for an unreasonable period of time, suspended, delayed, or interrupted by an act of the Owner in the administration of the project, an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by such unreasonable suspension, delay or interruption and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent (1) that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Construction Manager, or (2) for which an equitable adjustment is provided for or excluded under any other provision of this contract.

No claim under this clause shall be allowed (1) for any costs incurred more than 20 days before the Construction Manager shall have notified the Owner in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order), and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of such suspension, delay, or interruption, but not later than the date of final payment under the contract.

In the event work on the Project is suspended or otherwise delayed, the Owner shall reimburse the Construction Manager for the costs of his full job site staff as provided for by this Agreement for the first 30 days of such delay.

The Construction Manager shall reduce the size of his job site staff for the remainder of the delay period as directed by the Owner and, during such period, the Owner shall reimburse the Construction Manager for the costs of such reduced staff plus an amount not to exceed 30% for related payroll, taxes, insurance, pensions, and fringe benefits. Upon the termination of the delay the Construction Manager shall restore the job site staff to its former size, subject to the approval of the Owner.

ARTICLE 8: ARBITRATION

Any controversy arising out of or relating to this Agreement or the breach thereof shall be settled by arbitration in accordance with the rules then obtaining of the American Arbitration Association and judgement upon the award may be entered in any court having jurisdiction thereof.

ARTICLE 9: TERMINATION

The Owner may terminate all or any portion of the services to be performed by the Construction Manager under this Agreement, or any additions or modifications thereof, upon giving the Construction Manager 30 days written notice of such termination. In the event of termination, the Construction Manager shall deliver to the Project Manager all reports, estimates, schedules and other documents and data prepared pursuant to this Agreement.

The Construction Manager shall be entitled to receive payments for services provided to date of termination (including payment for the period of the 30-day notice) plus the ten percent (10%) retained thereon and reimbursement for approved reimbursable costs and expenses incurred by the Construction

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TYPE II PART B
Page 15

Manager to the date of termination. Prior to payment, the Construction Manager shall furnish the Owner with a release of all claims against the Owner, other than claims in stated amounts as may be specifically excepted by the Construction Manager from the operation of the release.

ARTICLE 10: TIME FOR COMPLETION

The schedule showing required design and construction completion dates is included in Appendix attached to this Agreement and incorporated herein by reference.

ARTICLE 11: CONSTRUCTION MANAGER'S COMPENSATION

11.1 The Owner will pay the Construction Manager as total compensation for services under Part B, Article 4, the fee of:

____ Dollars (\$______).

11.2 The Owner will pay the Construction Manager, on a reimbursable basis, for services provided under Part B, Article 5, General Condition Items, an amount not to exceed the sum of:

____ Dollars (\$______).

11.3 The Owner will pay the Construction Manager a sum equal to the cost of all separate contracts awarded for the construction of the project not to exceed the Guaranteed Maximum Price of:

____ Dollars (\$______).

11.4 Payments will be made for services under Part B of this Agreement after receipt of properly executed requests for payments as follows:

1. The Construction Manager will be paid monthly the fee for services performed under Article 4, and the cost of work performed on separate contracts, on the basis of and in proportion to the

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TYPE II PART B
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percentage of total completion of construction as determined and approved by the Owner. In making such progress payments there shall be retained 10% of the amount thereof until final completion and acceptance of the construction work.

2. For reimbursement of General Condition Items the Construction Manager shall be paid monthly.
3. After completion and acceptance of all construction work and upon receipt of a release of claims pertaining to all work performed under the terms of this Agreement, the retained amount due the Construction Manager shall be paid.

THE OWNER AND THE CONSTRUCTION MANAGER have, on the day, month and year first
above written, executed this Agreement in ____ counterparts, each of which
shall, without proof or accounting for the other counterparts, be deemed
an original thereof.

OWNER _____

nature:

Printed:

Title: _____ **Date:** _____

CONSTRUCTION MANAGER

Signature: _____
Printed:

Title: _____

License No.: _____ Date: _____

THIS FORM IS A GUIDE AND SHOULD NOT BE USED WITHOUT BEING
ADAPTED TO THE PARTICULAR NEEDS OF THE INDIVIDUAL PROJECT.

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TYPE II PERFORMANCE BOND

FORM OF CONSTRUCTION MANAGER'S PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that we _____

_____, as Principal,

and _____, as Surety,

are held and firmly bound unto _____

_____, as Obligee, hereinafter called the

Owner, in the sum of _____ Dollars

(\$_____), for the payment of which sum well and truly to be

made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the Principal entered into a contract in the prescribed Form of Construction Manager's Agreement, Part B, with the Owner dated , for

which contract is by reference incorporated herein and is made a part hereof as fully as if here set forth at length:

NOW THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof that may be granted by the Owner with or without notice of the Surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of

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TYPE II PERFORMANCE BOND
Page 2

said contract that may hereafter be made, then this obligation shall be void; otherwise this obligation shall remain in full force and virtue.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals this _____ day of _____, 19_____, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by each party's undersigned representative, pursuant to authority of its governing body.

ATTEST:

(Principal) _____

(Address) _____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

(By) _____

(Title) _____

(To be filled in by Surety):

Rate of premium of this bond is \$ _____ per thousand.

Total amount of premium charged is \$ _____

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TYPE II PAYMENT BOND

FORM OF CONSTRUCTION MANAGER'S PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS that we _____, as Principal,
and _____, as Surety,
are held and firmly bound unto _____
as Obligee, hereinafter called the Owner,
in the sum of _____ Dollars
(\$ _____), for the payment of which sum well and truly to be
made, we bind ourselves, our heirs, executors, administrators and successors,
jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the Principal entered
into a contract in the prescribed Form of Construction Manager's Agreement,
Part B, with the Owner, dated _____ for _____

which contract is by reference incorporated herein and is made a part hereof
as fully as if here set forth at length;

NOW THEREFORE, if the Principal shall promptly make payment to all persons
supplying labor and material in the prosecution of the work provided for in
said contract, and any and all duly authorized modifications of said contract
that may hereafter be made, then this obligation shall be void; otherwise
this obligation shall remain in full force and virtue.

IN WITNESS WHEREOF, the above-bouneden parties have executed this instrument
under their several seals this _____ day of _____, 19_____,
the name and corporate seal of each corporate party being hereto affixed and
these presents duly signed by each party's undersigned representative, pursuant
to authority of its governing body.

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TYPE II PAYMENT BOND
Page 2

ATTEST:

(Principal) _____

(Address) _____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

(By) _____

(Title) _____

(To be filled in by Surety):

Rate of premium on this bond is \$ _____ per thousand.

Total amount of premium charged is \$ _____.

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FACILITIES ENGINEERING AND CONSTRUCTION AGENCY

GUIDE FORMS FOR USE ON
DHEW FEDERALLY ASSISTED CONSTRUCTION MANAGEMENT PROJECTS

THESE FORMS ARE OPTIONAL AND MAY BE
USED IN REQUESTING CONSTRUCTION
MANAGEMENT FIRMS TO SUBMIT BIDS ON
TYPE II CONSTRUCTION MANAGER CONTRACTS

1. INVITATION TO BID FOR CONSTRUCTION MANAGEMENT SERVICES
2. ADDENDA FORM
3. CONSTRUCTION MANAGER'S BID FORM
4. CONSTRUCTION MANAGER'S BID BOND FORM

Exhibit 6

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INVITATION TO BID FOR CONSTRUCTION MANAGEMENT SERVICES

ROLE

Bids are invited for the role of Construction Manager (CM) for "the Project" consisting of the construction of:

_____ (Project Title)

_____ (City & State)

The Construction Manager system will be used in which the Construction Manager performs professional management services, but does not perform with his own forces any of the construction work with the exception of General Conditions. The Construction Manager shall operate as a member of an Owner-Architect-Construction Manager team which will be involved with production of the Project.

The Construction Manager is essentially an organization which has proven ability to provide technical consultation during the design stage of the project and to act as manager of construction in organizing and directing construction activities on a project of the scope and complexity similar to that identified above. He shall be responsible for cost estimates and cost control, review of design during the entire process with a view towards value engineering, construction coordination and scheduling, and direction of all construction activities. The function of the Construction Manager, coupled with the above, shall be the assumption of administrative duties in conjunction with the Owner and Architect towards procurement, bidding and contracting for materials and labor as required for construction of the Project.

The services of the Construction Manager will be procured by competitive bids under a two-part agreement.

Part A will include:

- 1) Consultation related to systems, sequences of events, materials and components.
- 2) Implementation of a management control system (MCS) for use in meeting the objectives of the project in a timely, economical, and acceptable manner.
- 3) Preparation of cost estimates and cost comparisons, including long-term cost effects of various alternatives.
- 4) Development of an acceptable Guaranteed Maximum Price (GMP), as set forth in Part A, Article 1, of the Construction Manager's form of agreement.

Part B will include:

- 1) The management and general supervision of the entire construction work.
- 2) The performance of general condition items.
- 3) The assumption of the responsibility for completing the project within the Guaranteed Maximum Price, which shall be the maximum cost to the Owner for the work to be performed by separate contract to complete construction of the project. The Guaranteed Maximum Price shall not include such project expenses as cost of the site, site survey and soil investigations, other professional design fees, moveable equipment, and finance costs.

PROJECT DESCRIPTION

The proposed _____, to be located _____ will contain approximately _____ gross square feet, _____ levels, and will include:

(BRIEF PROJECT DESCRIPTION)

(PROPOSED DESIGN AND CONSTRUCTION SCHEDULE)

- (1) Completion of Schematic Design _____
- (2) Completion of Preliminary Design _____
- (3) Development of Working Drawings and Specifications to a Stage Upon Which the Guaranteed Maximum Price will be Established _____
- (4) Completion of Bid Packages for Separate Contracts
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
 - (e) _____
- (5) Start of Construction _____
- (6) Completion of Construction _____

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THE BUILDING TEAM

It is the intent of the Owner to provide for early consolidation of the team of Owner/Architect/and Construction Manager wh' h allows acceleration of project development, production of drawings and specifications, procurement of labor and materials, early commencement of certain elements of construction, reduction in construction costs and finally, early occupancy.

PROJECT OWNER _____

PROJECT OWNER'S AGENT _____

ARCHITECT _____

FEDERAL AGENCY FURNISHING FINANCIAL ASSISTANCE

BIDDERS FOR ROLL OF CONSTRUCTION MANAGER

Only proposals from firms selected on the basis of prequalification information submitted _____ will be considered.
(Date)

Bidders are cautioned that participating Federal funds require that all construction contracts between the Owner and contractors and between the Construction Manager and contractors and between the contractors, sub-contractors and lesser tiers of subcontractors for work on this project shall require compliance of all parties thereto with provisions of U.S. Department of Health, Education, and Welfare, Form HEW 514, titled DHEW REQUIREMENTS FOR FEDERALLY ASSISTED CONSTRUCTION CONTRACTS REGARDING LABOR STANDARDS AND EQUAL EMPLOYMENT OPPORTUNITY, or the current edition of AIA Form A201 S/C.

PREPARATION OF BIDS

Form of bid issued with the bidding documents shall be properly and completely filled out, submitted in sealed envelopes, and marked plainly as noted below. All lined blanks in forms shall be filled in except those elements of Title and Location of the Bidder which do not apply. No other form of bid will be considered.

Any bid may be rejected as incomplete which is in any way conditional, or which makes alterations, omissions, or reservations to terms of the bidding documents.

Figures are required both in letters and in numerals. It shall be understood that, in event of conflict between lettered quotations and numerical quotations, lettered quotations shall govern.

Bid data except signatures shall be typed or printed legibly in ink. Mistakes may be crossed out and corrections inserted adjacent if each is initialed in ink by signer of bid.

Each bid shall show full business address of the Bidder and be signed by him with his usual signature. Bids by partnerships shall furnish full name of all partners and shall be signed in partnership name by one member of partnership or by an authorized representative, followed by signature and designation of person signing. Bids by corporations, with corporate seal affixed, shall be signed with legal name of corporation followed by name of State of incorporation and by signature and designation of person authorized to bind it in the matter. Name of each person

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signing shall also be typed or printed below respective signatures. The Owner may require satisfactory evidence of authority of officer signing in behalf of corporation.

BID SECURITY REQUIRED

Each bid shall be accompanied by a bid bond or certified cashier's check payable to the Owner in an amount equal to 5 percent of the bid price. This security shall act as guarantee that the Bidder shall not withdraw his bid during period stipulated below, and that, if awarded such contract by the Owner, the Bidder shall enter into contract for the role of Construction Manager in the form provided and shall provide insurance and other bonds as required.

The Bidder shall guaranteed his offer for a period of _____ days from date designated herein for receipt of bids. All but the three lowest bids may be withdrawn by Bidders after seven days following date for receipt of bids. Should extension beyond this period be required, it will be by mutual agreement with the remaining three lowest Bidders.

Bid securities will be returned to the three lowest Bidders following date of execution of Part A of the Form of Construction Manager's Agreement with the Successful Bidder, or at the expiration date of period stated above for the Bidders to guaranteed their bids, whichever date occurs first.

If Part A of the Form of Construction Manager's Agreement has not been executed within period designated for the Bidders to guarantee their

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bids, any Bidder's bid security will be returned upon his request unless he has been notified of acceptance of his bid prior to such request.

PROCUREMENT OF BIDDING DOCUMENTS

Bidders will be issued without charge schematic drawings, schematic specifications and a proposed schedule for design and construction of the project. Also to be issued: Form of Construction Manager's Agreement, and forms for contract security.

TIME AND PLACE FOR ISSUE OF BIDDING DOCUMENTS

At a Project Information Conference, _____
(Time, Date, & Location)

Bidders for Construction Manager shall attend this conference in person or be represented by a responsible managing officer.

TIME DEADLINE AND PLACE FOR RECEIPT AND OPENING OF BIDS

(Time, Date, & Location)

Bids shall be placed, together with a copy of bid security, in sealed envelope addressed to said Owner and inscribed in lower left hand corner; "BID FOR ROLE OF CONSTRUCTION MANAGER."

Bidder shall be responsible for delivery of bid to the specified address by or before the time stated above. No bid will be accepted after that hour and date.

Bids will be opened and publicly read immediately after the hour for receipt. Bidders may be present at the opening. No further notice of opening will be given except of change in opening place, date, or hour.

AWARD OF CONTRACT

The Owner intends to enter into Part A of the Form of Construction Manager's Agreement with the lowest responsive and responsible bidder. Part A, as per the Form of Contract Manager's Agreement, will be limited to services of Design Consultation until the final actual price of construction is established, to be compensated for according to the Successful Bidder's proposed Personnel Rate Schedule, and binds the Bidder to performance of Part B upon obtaining a Guaranteed Maximum Price within the Owner's available funds provided such action is in the Owner's best interest. Part B will be concerned with the actual construction of the Project.

The Owner reserves the right to waive minor irregularities in any responsive bid and to reject any or all bids.

Identity of the Successful Bidder may not be determined at the time of opening bids; the Owner reserves the right to obtain opinion of Counsel and the Architect on the legality and sufficiency of all bids.

EXECUTION OF CONTRACT

Within 10 days after the Owner's notification in writing of intent to award a Construction Manager's Agreement, the Successful Bidder shall enter into Part A of such agreement according to the Form of Construction Manager's Agreement issued with the Bidding Documents. Bidders are advised that should they be awarded PART A of the C.M. Agreement they will be required to furnish the following surety bonds and file them with the Owner prior to being awarded PART B of the Construction Manager's Agreement. Bonds shall be in the form issued with the bidding

documents, made payable to the Owner, issued by corporations legally licensed to transact business at the place of the work and satisfactory to the Owner, and shall be issued at the Successful Bidder's expense and maintained by him for life of the Contract. The Successful Bidder shall verify number of copies of each bond required.

- (1) Performance Bond in amount of 100 percent of the Guaranteed Maximum Price to assure the Owner of full and prompt performance of the Construction Manager's Agreement.
- (2) Labor and Materials (Payment) Bond in amount of 100 percent of the Guaranteed Maximum Price to assure payment of any and all claims for labor and materials used or consumed in construction of the Project.

DISCREPANCIES AND AMBIGUITIES

Any Bidder in doubt as to intent or meaning of any portion of bidding documents may make inquiry to the Architect for clarification not less than five working days before deadline specified for receipt of bids.

If documents are in error or do not fully explain the role, the Architect will issue written Addenda and distribute them to all set holders of record. Neither the Architect nor the Owner will be responsible for oral answers to inquiries.

PERSONNEL HOURLY RATE SCHEDULE

Bidders are required to submit a schedule with their bids indicating the hourly rate to be paid for labor in performance of General Condition Items set forth in the C.M. Agreement, PART R, Article 5.

* * * * *

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ADDENDUM

ADDENDUM NO. 1

PROJECT NO. _____

To Bidding Documents for Project Title

Holders of Bidding Documents for the subject project are hereby informed that these documents are modified as noted in this Addendum; and that all conditions not modified herein remain unchanged.

1. The following pages or sheets of the Bidding Documents are revised by this Addendum and are enclosed herewith as revised to replace the respective original pages:

DOCUMENT NAME

PAGE/SHEET NOS.

2. The following new pages of the Bidding Documents are issued by this Addendum and are enclosed herewith to supplement the data previously issued:

DOCUMENT NAME

PAGE NOS.

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BID FORM

FORM OF CONSTRUCTION MANAGER'S BID

DATE: _____

(Owner)

(Name of Facility)

(Address)

(City, State, Zip)

Gentlemen:

THE UNDERSIGNED, doing business under the name of _____

having examined the bidding documents prepared by _____

(Architect) which documents consist of Schematic Drawings and Schematic Specifications, General Conditions, Form of Contract Manager's Agreement, Forms of Performance Bond and Payment Bond; and having examined the Invitation to Bid, this Form of Bid, and the Form of Bid Bond; and having examined all Addenda and Notices which modify or clarify the above listed items, hereby agrees to furnish all services and to perform all the work described by these contract documents according to the conditions prescribed therein for the following considerations:

1. For services limited to Design Consultation until the final actual price is established, and development of an acceptable Guaranteed Maximum Price for construction as defined in the Form of Construction Manager's Agreement, Part A, Article 1, the fee of _____

Dollars (\$ _____).

2. For services specified under Part A, Article 2 "Management Control System (MCS)," the fee of _____ Dollars
(\$ _____).

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BID FORM
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3. For services during construction, as defined in the Form of Construction Manager's Agreement, Part B, Article 4, "Construction Manager's Tasks," the fee of _____ Dollars (\$_____).

GUARANTEE: The undersigned guarantees his bid for a period of _____ days from date designated for receipt of bids and understands he may not withdraw his bid during this period.

ADDENDA: Receipt of all addenda or notices issued prior to receipt of bids is acknowledged as follows:

Addendum No. _____ dated _____.

Addendum No. _____ dated _____.

Addendum No. _____ dated _____.

CLASSIFICATION OF BIDDER (Type or print answers to classification below which defines the Bidder's type of organization; furnish all information required for appropriate classification):

BIDDER IS AN INDIVIDUAL

(Name as stated on State Contractor's License)

BIDDER IS AN INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

(Firm name as stated on State Contractor's License)

(Individual's name as stated on State Contractor's License)

BIDDER IS A PARTNERSHIP

(Partnership name as stated on State Contractor's License)

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BID FORM

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Names of all Partners:

BIDDER IS A CORPORATION

(Full name of corporation as stated on State Contractor's License)

Corporation is incorporated in State of ()

BIDDER IS A JOINT VENTURE

(Full name of joint venture as stated on State Contractor's License)

Joint Venture is incorporated in State of ()

INSURANCE:

Workmen's Compensation Insurance is placed with:

Public Liability and Property Damage Liability Insurance is placed with:

EXECUTION OF CONTRACT: If written notice of acceptance of this bid is mailed, telegraphed, or delivered to the undersigned within the time stated in the Invitation to Bid for Construction Manager, or any time thereafter before this bid is withdrawn, the Undersigned shall, within 10 calendar days after the date of receipt of such written notice, execute and deliver Part A of the Form of Construction Manager's Agreement as issued with the bidding documents and shall diligently perform all terms and conditions of said Part A, including but not limited to submission of a Guaranteed Maximum Price by _____ (date).

If, after submission of the Guaranteed Maximum Price, a written notice

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BID FORM

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of acceptance by the Owner of the Bidder's Guaranteed Maximum Price is mailed, telegraphed, or delivered to the Undersigned, the Undersigned shall, within 10 calendar days after date of receipt of such written notice, execute and deliver to the Owner a contract in the form of Part B of the Form of Construction Manager's Agreement, and provide Performance and Payment Bonds and certificates of Insurance as required by the General Conditions and any Supplementary General Conditions.

BIDDER'S SIGNATURE (Affix Corporate Seal if incorporated):

Signed _____

Title _____

Signed _____

Title _____

Name of Firm, Partnership, or Corporation:

Business Address _____

Mailing address to which notice of acceptance may be mailed or telegraphed:

* * * * *

ENCLOSURE: Personnel Hourly Rate Schedule for determining labor costs under C.M. Agreement, PART B, Article 5, General Conditions.

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BID BOND

FORM OF CONSTRUCTION MANAGER'S BID BOND

KNOW ALL MEN BY THESE PRESENTS that we _____, as Principal,
and _____, as Surety,
are held and firmly bound unto _____, as Obligee, hereinafter called the
Owner, in the amount of _____ Dollars
(\$ _____), for the payment of which sum well and truly to be
made, we bind ourselves, our heirs, executors, administrators and successors,
jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the principal
submitted to the Owner a certain Bid, attached hereto and hereby made a part
hereof, to enter into a contract in writing for _____

_____.

NOW THEREFORE, if said Bid shall be rejected; or if said Bid shall be accepted,
and the Principal shall execute a contract in the prescribed Form of
Construction Manager's Agreement, Part A, and shall diligently perform all
the terms of said Part A Agreement, and if either: (1) the Prircipal's
Guaranteed Maximum Price developed thereunder be not accepted by the Owner
within the Bid guarantee period; or in the alternative (2) if the said
Principal's Guaranteed Maximum Price be accepted by the Owner within the
Bid guarantee period and the Principal shall execute a contract in the
prescribed Form of Construction Manager's Agreement, Part B, and shall execute
and deliver Performance and Payment Bonds in the forms prescribed, and shall
in all other respects perform the agreement created by the acceptance of said

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BID BOND

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Bid, then this obligation shall be void; otherwise this obligation shall remain in force and effect, it being expressly understood and agreed that the liability of the Surety for any and all default of the Principal hereunder shall be the amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall in no way be impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the above-bouneden parties have executed this instrument under their several seals this _____ day of _____, 19_____, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

ATTEST:

(Principal) _____

(Address) _____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

(By) _____

(Title) _____

(To be filled in by Surety):

Rate of premium on this bond is \$ _____ per thousand.

Total amount of premium charged is \$ _____.

DHEW FACILITIES ENGINEERING & CONSTRUCTION - REGIONAL ENGINEERS

Region I: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

Mr. James J. Sullivan (617) 223-6641
John F. Kennedy Federal Building
Boston, Massachusetts 02203

Region II: New Jersey, New York, Puerto Rico, Virgin Islands

Mr. Frank C. Trentacosti (212) 264-3600
26 Federal Plaza
New York, New York 10007

Region III: Delaware, Maryland, Pennsylvania, Virginia, Washington, D.C., West Virginia

Mr. Owen J. Johnson (215) 597-9001
401 North Broad Street
Philadelphia, Pennsylvania 19108

Region IV: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee

Mr. James E. Yarbrough (404) 526-3816
50 Seventh Street, N.E.
Atlanta, Georgia 30323

Region V: Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin

Mr. Melvin Fisher (312) 353-6595
300 South Wacker Avenue
Chicago, Illinois 60606

Region VI: Arkansas, Louisiana, New Mexico, Oklahoma, Texas

Mr. Elmer Cain (214) 749-2115
1114 Commerce Street
Dallas, Texas 75202

Region VII: Iowa, Kansas, Missouri, Nebraska

Mr. Marvin Monk, Jr. (816) 374-2387
601 East 12th Street
Kansas City, Missouri

Region VIII: Colorado, Montana, North Dakota, South Dakota, Wyoming, Utah

Mr. Thomas E. Moore (303) 837-3119
Federal Office Building, Room 9017
19th and Stout Streets
Denver, Colorado 80202

Region IX: Arizona, California, Guam, Hawaii, Nevada

Mr. Jerry Kosro (415) 556-7934
50 Fulton Street
San Francisco, California 94102

Region X: Alaska, Idaho, Oregon, Washington

Mr. Robert Mommsen (206) 442-0406
The Arcade
1321 Second Avenue
Seattle, Washington 98101